HIST 690

Forensic illusions: Medico-legal representations, scandals and reform in mid-twentieth century Britain, Canada and New Zealand

By Mei-Chien Huang

Primary Supervisor: Heather Wolffram

Secondary Supervisor: David Monger

February 2020

This thesis is submitted in fulfilment of the requirements for the degree of Master of Arts in History at the University of Canterbury. This thesis is the result of my own work. Material from the published or unpublished work of other historians used in the thesis is credited to the author in the footnote references. The thesis is approximately 47,600 words in length.

Abstract

The media representations of charismatic medico-legists from the British Commonwealth and of the wondrous powers of forensic medicine greatly influenced the perception of the discipline's reliability and accuracy during the twentieth century. However, as recent reports of crises in the forensic sciences show, the irrefutability of scientific evidence is illusionary. While some scholars have argued that reforms in the forensic sciences were triggered by scandals, this thesis shows that this was not the case during the mid-twentieth century.

This work expands on the existing secondary sources on the history of forensic medicine and forensic science by comparing the British, Canadian and New Zealand traditions, and the way forensic pathologists portrayed themselves in the media and through their own writings. It focuses on three notable miscarriage of justice cases, that of Timothy Evans, Steven Truscott and Eric Mareo, to demonstrate how medico-legists successfully minimised the impact of potential scandals in forensic medicine by presenting a united front. It is argued that the public image of forensic medicine did not suffer as a result, and provided very little impetus for change in the forensic science services. Indeed, forensic medicine and forensic science could also be seen as victims of their own successful portrayal, as very few reforms were implemented in the field throughout this period. Changes in forensic medicine and forensic science occurred incrementally only through necessity and demand, since none of the governments examined in this study prioritised extensive reforms for the discipline. Other than the extensive use of newspapers and journal articles from British Commonwealth countries, this thesis also uses sources that have not been examined closely before, such as material from Professor Bernard Knight's archives and the autobiography of a New Zealand pathologist, Dr P. P. Lynch. They help form a more complete narrative of developments within forensic medicine and forensic science within the British Commonwealth.

Table of Contents

List of Abbreviations

3rd ser. – Third Series

5th ser. – Fifth Series

BKP – Papers of Professor Bernard Knight

Dir. – Directed by

Comp. – Compiled by

Doug. K. B. – Douglas' King's Bench Reports

Eng – England

JGP – Papers of Professors John Glaister Sr. and John Glaister Jr.

NA – National Archives, London

NZ – New Zealand

ONCA – Ontario Court of Appeal

Parl. Deb. – Parliamentary Debates

RDFMS – Records of the Department of Forensic Medicine and Science

s. v. – sub verbo, meaning 'under the title'

UC – University of Cardiff

UG – University of Glasgow

UK – United Kingdom

Introduction

From the time medical experts first catapulted into the public imagination through the famous poisoning trials of the eighteenth and nineteenth centuries, they have not always had a positive reputation. This was evident after the English poisoning trials of William Palmer and Thomas Smethurst, where medical experts gave contradictory scientific testimonies in Court. The level of mistrust of English toxicologists was such during the nineteenth century that one commentator noted 'at present… neither the judge, the jury, nor the public, have any confidence in the scientific evidence in cases of poisoning.'[1] Similar scepticism of medical witnesses was seen elsewhere in the British Empire during the mid-nineteenth century. In New Zealand, the judge's vitriol against the main prosecution medical witness in the first trial of William Jarvey was said to have contributed to a hung jury.[2] This is a far cry from the reliance on New Zealand pathologists' evidence shown by the judge, jury and the public in the Eric Mareo case less than a century later,[3] when they condemned the defendant even though the New Zealand experts had never handled a case of murder by veronal poisoning before. This thesis argues that while forensic medicine was not immune from scandals during the twentieth century, medico-legal experts minimised problems in forensic medicine and actively shaped the reputation of forensic medicine as an essential and reliable part of crime investigation across the Commonwealth. As a result of medico-legal experts' success in securing the reputation of their field, there was little impetus on the government to institute reforms of forensic medicine to respond to scandals during much of the twentieth century until DNA testing exposed the flaws in the established forensic sciences.[4] DNA profiling set the course for further exposure of inadequacies in traditional forensic evidence. This is evident in the House of Lord's 2019 report which bemoans the lack of accountability of the forensic sciences.[5] As a result, it has become more relevant to consider the events that shaped current attitudes towards the forensic science services and reassess the widespread belief in forensic medicine's supposed accuracy. It is important to re-examine the context behind general governmental inaction in the field of forensic science and

---

[1] *Chemical* news 1 (1859-60), 286, quoted in Ian Burney, *Poison, Detection, and the Victorian Imagination* (Manchester: Manchester University Press, 2006), p. 168.
[2] A. H. McLintock, ed., *An Encyclopaedia of New Zealand,* 1966 ed., s. v. 'The Jarvey Trial, 1865', accessed July 22, 2019, https://teara.govt.nz/en/1966/trials-notable/page-3; 'Trial of Captain Jarvey', *Otago Daily Times,* March 23, 1865, 5; 'Trial of Captain Jarvey', *Evening Post*, September 18, 1865, 3.
[3] 'Mareo guilty', *New Zealand Herald,* February 27, 1936, 13.
[4] Simon A. Cole, 'Forensic Science and Wrongful Convictions: From Exposer to Contributor to Corrector', *New England Law Review* 46, no. 4 (Summer 2012): 714.
[5] Science and Technology Select Committee of the House of Lords*, Forensic Science and the Criminal Justice System: A Blueprint for Change* (London: House of Lords, 2019), p. 3, https://publications.parliament.uk/pa/ld201719/ldselect/ldsctech/333/333.pdf.

forensic medicine, so the fallibilities of the forensic sciences can be addressed adequately and the existing system of forensic sciences can be strengthened.

'Forensic medicine' was a term coined in the twentieth century that gradually replaced 'medical jurisprudence' in denoting the use of medical knowledge to solve crimes.[6] Forensic medicine as we know it today first came to the public's attention through the trial of Dr Hawley Harvey Crippen in 1910. It was in this trial that the figure of the 'celebrity pathologist' was born through the performance of Sir Bernard Spilsbury (1877-1947).[7] A distinct specialist subject called forensic science was developed towards the mid-twentieth century.[8] In the early-twentieth century, however, many forensic pathologists were not restricted to performing post-mortem examinations, but pioneered new areas of what was to become forensic science. For example, Sir Sydney Smith (1883-1969) was a pioneer in the field of ballistics: he wrote journal articles about firearms, their projectiles and firearms injuries to further assist crime investigations.[9] These new areas of science were treated as part of forensic medicine, until it gradually became impossible for one medico-legal expert, also known as the medico-legist, to have in-depth knowledge of all areas of forensic science. Therefore, the early and mid-twentieth century was a period when forensic medicine and forensic science were not clearly 'differentiated', because new forensic subjects did not always fit easily into either science or medicine. Since medico-legists and other interested parties did not immediately agree on suitable categorisation for these emerging disciplines during this period,[10] the concept of forensic medicine was more fluid compared to what it is now.

While some historians have considered the portrayal of pathologists in the media,[11] they have tended not to focus on medico-legists' own efforts to actively mould their field's reputation or to advance beyond mid-twentieth century in their analyses. This thesis elaborates on the theme, but focuses on pathologists who were active during the mid-twentieth century. It discusses how medico-legists actively shaped the reputation of forensic medicine and evaluates the effectiveness of these attempts when there were scandals in forensic medicine. Controversial cases present greater opportunities for comparison between how different medico-legists were presented and how they

---

[6] *Lexico,* s. v. 'Forensic medicine', accessed July 2, 2019, https://www.lexico.com/en/definition/forensic_medicine.
[7] Ian Burney and Neil Pemberton, 'The Rise and Fall of Celebrity Pathology', *British Medical Journal* 341, no. 7786 (December 2010): 1319, https://doi-org.ezproxy.canterbury.ac.nz/10.1136/bmj.c6500.
[8] Alison Adam, *A History of Forensic Science: British Beginnings in the Twentieth Century* (London: Routledge, 2016), p. 2.
[9] See for e.g. Sydney Smith, 'The Investigation of Firearm Injuries', *Transactions of the Medico-Legal Society* 23 (1928-1929): 81-106.
[10] Adam, *A History*, p. 2.
[11] Burney and Pemberton, 'The Rise and Fall'; Nicholas Edward Duvall, 'Forensic Medicine in Scotland, 1914-39', (PhD diss., University of Manchester, 2013), 210-253.

each managed scandals. Simon A. Cole has argued that scandals sparked reforms in modern forensic sciences, but this study shows that forensic medicine advanced incrementally, rather than through drastic reforms or overhauls of the entire system for most of the twentieth century. This thesis fills a gap in the existing scholarship about the history of forensic medicine by considering major mid-twentieth-century cases across Britain, Canada and New Zealand. Most of the existing literature is either dedicated to one country, or surveys several countries at once without comprehensively comparing the development of medical jurisprudence between them. Similarly, while anthologies of true crime have been produced, none of them strictly compares the scientific investigations between different Commonwealth countries in the mid-twentieth century. This thesis concentrates on the cases of Timothy Evans (1949, England), Steven Truscott (1959, Canada) and Eric Mareo (1936, New Zealand). These cases were chosen because their medical evidence played an integral part in determining the guilt of the defendant and caused controversy in the years afterwards.

Methodology

One means of assessing how medico-legists have been portrayed over time and how they have attempted to delineate their own reputations is to analyse newspaper reports featuring pathologists. Furthermore, letters to the editor and editorials about notable trials or miscarriages of justice also reveal some of the public opinions about the crime, the investigation process and the writers' impressions of forensic medicine. The majority of the newspapers considered in this thesis are those digitised in the *Times Digital Archive*, the *British Newspaper Archive*, *Newspapers.com* and *Papers Past*. There are several limitations to newspapers as a primary source. While optical character recognition (OCR) has ensured efficient searches of digitised newspapers, its accuracy can be compromised if the newspaper has not been scanned properly, or if the original print has faded to the extent that OCR cannot recognise the text. The reporters' misspelling of names can also mean that some articles are omitted from the search results.[12] This is mitigated to some extent by not searching exact phrases and including variations of keywords. Newspapers tend to sensationalise, especially in gruesome cases like the John Christie murders (1953, England). In those cases, the majority of the newspapers devoted their headlines to the bodies that were found, and medico-legists were cast as secondary characters whose presence underlined the horrible nature of the crimes.[13] Newspapers represent complex discourses between the traditions of journalism and the society, economy or the politics they interact with. They can both reflect on the civilisation and

[12] Adrian Bingham, 'The Digitization of Newspaper Archives: Opportunities and Challenges for Historians', *Twentieth Century British History* 21, no. 2 (June 2010): 228-229, https://doi.org/10.1093/tcbh/hwq007; Bob Nicholson, 'The Digital Turn: Exploring the Methodological Possibilities of Digital Newspaper Archives', *Media History* 19, no. 1 (2013): 59-60, https://doi.org/10.1080/13688804.2012.752963.
[13] See for e.g. 'Body No. 4 – Another Woman- Found in Murder House', *Sunderland Echo,* March 25, 1953, 11.

facilitate changes within it.[14] The newspapers' content is also shaped by the inclinations of the editors. For instance, Sir Linton Andrews, an editor for the *Yorkshire Post,* wrote an editorial in his newspaper in support of a further inquiry into Evans' conviction after *Ten Rillington Place* was published. The widespread doubt over Evans' conviction was reflected in various newspapers, which helped inform the Home Office's decision-making about how they should proceed with the controversy. The discussions reflected the increasing uneasiness over the issue of the death penalty, ultimately resulting in legislative changes.[15]

Various national and local publications are used in order to gain a more balanced view. The *Times* is a British national newspaper based in London, in contrast to local papers such as the *Nottingham Journal.* Different newspapers have different political leanings as well. The *Guardian* has been liberal in its politics since the paper's inception.[16] On the other hand, the *Times* has been conservative in its political outlook for most of the twentieth century.[17] The content of the newspapers is also influenced by the readership they cater for. Even though both the *Times* and the *Daily Mail* may be regarded as politically conservative papers, the *Times* has a reputation of being more trustworthy and more likely to be relied upon by the British elites.[18] In contrast, the *Daily Mail* is more salacious and aims to appeal to middle-class British citizens.[19] For New Zealand and Canada, newspapers from different regions of the countries are considered. There are fewer noticeable differences in the language and content in those newspapers compared to the British press. This could be because social class is less prominent in both New Zealand and Canada whereas British newspapers often target readers from a certain social background. The syndication of articles in New Zealand and Canada also account for slightly different versions of the same article being published in various newspapers. The increased literacy levels among the general British, Canadian and New Zealand population means that the reporters assumed their readers had the requisite level of learning to understand the scientific aspects of crime investigation. During Truscott's appeal in 1965, for example, the Canadian newspapers dissected the opposing views of the medical experts, clearly

[14] Martin Conboy, introduction to *Journalism: A Critical History* (London: SAGE Publications, 2004), https://ebookcentral.proquest.com/lib/canterbury/reader.action?docID=254578.
[15] Linton Andrews, 'Who Now Can Say that Evans Was Guilty?', *Yorkshire Post,* January 16, 1961, HO45 25655/957250/133, NA.
[16] 'Key Moments in the Guardian's History: A Timeline', Guardian, accessed July 4, 2019, https://www.theguardian.com/gnm-archive/2002/jun/11/1.
[17] Mick Temple, *The British Press* (Berkshire: Open University Press, 2008), pp. 33-34, 64, https://ebookcentral.proquest.com/lib/canterbury/reader.action?docID=409779#.
[18] Allan Nevins, 'American Journalism and Its Historical Treatment', *Journalism and Mass Communication Quarterly* 36, no. 4 (1959): 413-414, https://doi.org/10.1177/107769905903600403.
[19] Temple, *British Press,* pp. 28-29.

because they expected their readers to understand medical theories.[20] However, finer details sometimes confused the reporters and resulted in misreporting. This is evident towards the end of William Bayly's trial (1933, New Zealand), where different newspapers gave various interpretations to the prosecutor's objection to the defence counsel's closing statement and the judge's response to it.[21] The accuracy of facts can thus be gauged from whether there is consistency between different news reports.

While the press provides information about how pathologists were portrayed to the public, the pathologists' personal papers in university archives demonstrate their aspirations, thought processes and actions. They show possible influences and motivations behind the decisions the pathologists made about their public images. Professor Bernard Knight (1931-) gave his personal papers to the University of Cardiff and Professor John Glaister Jr. (1892-1971) left his to the University of Glasgow. Both professors were working pathologists during the twentieth century. However, it is arguable that the professors shaped their own legacies by being selective about the material they preserved in order to cement a positive public image. For example, the scrapbooks of newspaper cuttings compiled by Knight and Glaister Jr. tend to be positive about their own work. Even though the professors created the majority of the materials in the archives, these materials do not necessarily reflect their authors' views. James Young argues that material created contemporaneously to the historical events does not have the benefit of objectivity which comes with the passage of time.[22] This is true for the professors because professional or personal constraints on the authors would have influenced the views they expressed at the time. For instance, Knight wrote an unpublished draft article summarising the view that Truscott was guilty in the late twentieth century.[23] However, during the Truscott appeal in 2007, Knight openly criticised the medical evidence in the Crown case as a 'mishap'.[24] Therefore, archival material needs to be treated cautiously because it could be misleading if it was not read together with other sources.

Whereas materials from university archives reflect their creators' motivations, the material in the National Archives show the confidential discussions between officials that shaped governmental stances and outlook about matters which generated keen public interest. In particular, they provide

---

[20] For e.g. 'Truscott Case: British Expert Supports Crown on Time of Death', *Ottawa Citizen,* October 12, 1966, 15.
[21] Compare 'Murder Trial', *Evening Post,* June 20, 1934, 10; and 'Bayly Trial', *Press*, June 21, 1934, 7.
[22] James E. Young, 'Interpreting Literary Testimony: A Preface to Rereading Holocaust Diaries and Memoirs', *New Literary History* 18, no. 2 (1987): 416-418, quoted in Duvall, 'Forensic Medicine', 213.
[23] Bernard Knight, 'A Plethora of Pathologists: the Case of Steven Truscott', late twentieth century, GB 1239 454/4/11, BKP/UC.
[24] Julian Sher, *Until You Are Dead: Steven Truscott's Long Ride into History* (Toronto, Random House, 2001), p. 560.

useful information about the roles the pathologists played in official inquiries into high-profile crimes and how they responded to potential scandals. They have a collection of official correspondence, reports, internal governmental memoranda, transcripts and newspaper cuttings about the Evans and Christie cases. The majority of these materials relate to the judicial inquiry of 1965 conducted by Justice Daniel Brabin into the Evans case. Given that they are government documents of the time, compiled in order to guide decisions like setting up official inquiries, it is arguable that greater efforts were made to be accurate. Despite this, some records have been lost, and it is not known what information was in those lost files and under what circumstances those records were lost. Additionally, each creator of documents also had their own agenda, and to some extent they are subject to the same limitations discussed above in relation to other archives. In the Evans case, Evans alleged in his trial that he confessed because he was fearful of police brutality.[25] While there are small discrepancies between the evidence of different police officers, all officers agreed that Evans was not coerced when he made his confessions at the Notting Hill police station.[26] Even if Evans' allegations were true, it is very unlikely that the police would admit to any impropriety in their evidence. However, these archival materials still have value because they are official versions of events which the officers involved asserted through two different governmental inquiries over the years.

While medico-legists have had to rely on journalists to project the image they wanted to publicise through newspapers, they had greater control over their own portrayals in their autobiographies. This thesis considers autobiographies by pathologists from Commonwealth countries such as Professor Keith Simpson (1907-1985) and Dr P. P. Lynch (1894-1978). Autobiographies also provide insight into the authors' thoughts on various topics relating to forensic medicine and the crime investigation processes. As individuals who were actively involved in the investigative process at the time, the pathologists use their autobiographies to give the readers an exclusive view of their most notable cases and provide details which were not accessible through newspapers. For example, Simpson described the 'terse' exchanges he had with Professor Francis Camps (1905-1972) during a case, which were not reported in the press.[27] There are, however, several disadvantages to using autobiographies as sources. The books are usually written a long time after events took place, so it is possible the authors recalled details inaccurately. In Dr Milton Helpern's autobiography, his account

[25] John Scott Henderson, 'Report of an Inquiry into Certain Matters Arising out of the Deaths of Mrs Beryl Evans and Geraldine Evans and out of the Conviction of Timothy John Evans of the Murder of Geraldine Evans', 1953, p. 11, CAB143/6, NA.
[26] Daniel Brabin, 'Inquiry Report: Final Draft', 1966, chap. 7, CAB 143/70, NA.
[27] Keith Simpson, *Forty Years of Murder* (London: HarperCollins, 1978), pp. 240-241.

of the Truscott case contains factual errors.[28] Smith and Glaister Jr. also wrote their autobiographies and recounted their famous cases during the mid-twentieth century. They both engaged ghost writers for their autobiographies. The style of Smith's first draft was thought to be too academic,[29] which led his publishers to cut some scientific details to ensure that the autobiography was readable to the average layperson.[30] Nicholas Duvall indicates that the authors of autobiographies also had the agenda of shaping their legacies in forensic medicine through their writings. Smith and Glaister Jr. were likely to portray themselves, their investigative work, and their actions positively, which would have distorted the way they described events.[31] This is comparable to individual selections of materials to be preserved in archives as discussed above. In *Mostly Murder,* Smith never mentioned his collaboration with Glaister Jr. in his account of Helen Priestly's murder in 1934, where they attempted to link the hairs and fibres from the sack containing the victim's body to the murderer's home.[32] While this could be explained by the relatively minor role Glaister Jr. had,[33] it is also plausible that Smith wished to emphasise his own role in the investigations.

Since fiction is another medium the medico-legists used to shape the image of forensic medicine, this thesis also refers to fictional works completed by scientists in the mid-twentieth century. Both Cardiff and Glasgow University archives contain drafts of detective fiction and screenplays by Knight and Glaister Jr. respectively. Another scientist who wrote detective fiction around this period is R. Austin Freeman, the creator of Dr John Thorndyke. The fictional works are similar to newspapers because the facts are also likely to be embellished in order to attract a readership and interest in the subject matter. However, this may be mitigated to some extent because Knight promised publicly to portray the practices of forensic medicine and police procedures more realistically than other detective fiction.[34] This marketing strategy could have acted as a check against portrayals of 'bad' science because other professionals could take Knight to task if he had not done what he promised. The portrayal of the forensic pathologist at work is consistent in Knight's fictional and non-fictional

---

[28] Bernard Knight and Milton Helpern, draft of *Autopsy: the Memoirs of a Medical Detective*, 1977, p. 79, GB 1239 454/1/7/2, BKP/UC.
[29] Duvall, 'Forensic Medicine', 218-219.
[30] Patrick Pringle to Sydney Smith, 3 December 1958, Sydney Smith Papers, SMS/7/63, Royal College of Physicians of Edinburgh, quoted in Duvall, 'Forensic Medicine', 219.
[31] Duvall, 'Forensic Medicine', 214.
[32] Sydney Smith, *Mostly Murder* (New York: David McKay, 1959), pp. 205-219, https://heinonline-org.ezproxy.canterbury.ac.nz/HOL/Page?collection=beal&handle=hein.beal/mosmurer0001&id=5&men_tab=srchresults; M. Anne Crowther and Brenda White, *On Soul and Conscience: The Medical Expert and Crime: 150 Years of Forensic Medicine in Glasgow* (Aberdeen: Aberdeen University Press, 1988), pp. 79-80.
[33] Mei-Chien Huang, 'Sir Sydney Smith's Contribution to the Change of the Medical Detective's Working Style from the "Lone Expert" to "a Team of Scientists" in Early Twentieth Century England and Scotland', (Honours diss., University of Canterbury, 2014), 30.
[34] 'The Doctor Deals in Murder- the Fictional Kind', August 12, 1966, GB 1239 454/6/26/1, BKP/UC.

writings,[35] which tends to suggest that Knight fulfilled his public promise. Compared to other crime fiction writers, the medico-legists are likely to portray the procedures and the assets of forensic medicine accurately. Both Knight and Glaister Jr. produced writings directly based on real-life crimes. For example, Knight's *The Thread of Evidence* clearly aims to portray forensic medicine positively, as the novel is based on the Mamie Stewart case (1919, Wales), where a skeleton was successfully identified as a girl who had been missing for decades.[36] These texts provide opportunities to compare the works written by two different pathologists and how they each attempted to portray forensic medicine in fiction.

The medico-legists also retained greater control over articles published in professional journals such as the *British Medical Journal,* which further illustrate how they responded to scandals in forensic medicine. The academic discussions and jargon are appropriate for interested professionals the journals are aimed at. The articles not only keep the professionals informed on the latest scientific developments, they also reinforce the pathologists' roles in crime investigations and enhance the reputation of forensic medicine. For instance, although other professionals assisted Camps' investigations into the English soldier Frederick Emmett-Dunne,[37] it is clear that Camps was in charge of a successful scientific investigation where forensic medicine proved a murder. Journal articles provide insight into how the experts justified their conclusions, and opportunity for comparisons between how different experts treated opposing scientific opinions. According to Itiel Dror, many forensic experts are blind to the influence of biases and tend to assert that they are completely impartial. He believes that many medico-legists take the court's acceptance of their scientific findings as proof that their conclusions and interpretations are correct.[38] This is evident in Simpson's article about the Truscott case, where he not only reiterated that his view was preferred by the Court,[39] but also implied that Camps' opposing opinion was not based on sound grounds.[40] It is arguable that Simpson was negatively influenced by the outdated medical literature quoted in Isabel LeBourdais' book, *The Trial of Steven Truscott*.

As medico-legists also shaped their own legacies during the process of providing witness testimonies in Court and in governmental inquiries, trial and inquiry transcripts are good primary source

---

[35] Compare Bernard Knight, draft of *The Expert*, 1975-1976, GB 1239 454/1/6, BKP/UC and Bernard Knight, draft of *Murder, Suicide or Accident: The Forensic Pathologist at Work*, 1970, pp. 46-78, GB 1239 454/1/4, BKP/UC.
[36] 'The Doctor Deals in Murder'.
[37] Francis E. Camps, 'The Case of Emmett Dunne', *Medico-Legal Journal* 27, no. 4 (1959): 159, 161.
[38] Itiel Dror, 'Biases in Forensic Experts', *Science* 360, no. 6386 (April 2018): 243, https://doi.org/10.1126/science.aat8443.
[39] Keith Simpson, 'The Case against Steven Truscott in Canada', *Medico-Legal Journal* 36, no. 2 (1968): 65.
[40] Simpson, 'Steven Truscott', 59.

materials because they are records of official evidence. They are valuable because they provide the viewpoints of all interested parties, as well as that of the medico-legist. Trial transcripts for the Evans and Christie cases are a part of the *Notable British Trials* series. The transcript for the Bayly case was also published soon after the trial's conclusion. However, the trial transcripts may not have been complete transcripts since information could be edited later. The editors of the transcripts clearly had their own views, which might have influenced how they chose the material to be included. For example, F. Tennyson Jesse openly stated her belief that Christie murdered Beryl and Geraldine Evans.[41] The accuracy of the trial transcripts is also dependent on the editor's level of comprehension and the knowledge of those who helped them. In *The Bayly Case*, H. J. Wilson thanked the judge, the lawyers, and the two pathologists for their help in reviewing the proof of evidence.[42] It is unclear what level of expertise any of these figures had in technical subjects such as photography. While each primary source has its limitations, they can be addressed by the use of a range of primary and secondary materials to form a more balanced picture. When the materials are examined critically and utilised together, several layers of meaning may be gleaned from some of the sources which can inform the way they are interpreted. The primary sources provide a wide range of perspectives on how pathologists projected the role they played in crime investigations and how forensic medicine was portrayed in the media, which enables a more objective assessment to be made.

The historical scholarship on forensic medicine and forensic science is still an emerging field. Most texts that trace the history of forensic science in England appeared in the 2000s. In fact, few explored this subject prior to Jennifer Ward's thesis, which traces the development of forensic medicine and forensic science in England during the nineteenth and early twentieth centuries.[43] Ian Burney and Katherine Watson have both studied similar time periods as Ward, and their work also gives more emphasis to the origins of English medical experts in the nineteenth century.[44] A text which discusses the Scottish tradition is M. Anne Crowther and Brenda White's *On Soul and Conscience*, which focuses mostly on the developments of forensic medicine in Glasgow.[45] In comparison, Duvall's thesis provides a more complete view of forensic medicine in Scotland because

[41] F. Tennyson Jesse, ed., introduction to *Trials of Timothy John Evans and John Reginald Halliday Christie* (Edinburgh: William Hodge, 1957), p. xci.
[42] H. J. Wilson, ed., Editor's Note to *The Bayly Case* (Wellington: National Magazines, 1934).
[43] Jennifer Ward, 'Origins and Development of Forensic Medicine and Forensic Science in England, 1823-1946', (PhD diss., Open University, 1993).
[44] Ian Burney, *Bodies of Evidence: Medicine and the Politics of the English Inquest, 1830-1926* (Baltimore: John Hopkins University Press, 2000); Katherine Watson, *Poisoned Lives: English Poisoners and Their Victims* (London: Hambledon and London, 2004).
[45] Crowther and White, *On Soul and Conscience*.

he examines both Edinburgh and Glasgow experts.[46] One of the most recent pieces of scholarship is Alison Adam's *A History of Forensic Science: British Beginnings in the Twentieth Century.* She offers a synthesised account of different scientific techniques and phenomena created by forensic science.[47] Her work is centred mostly on the British traditions in the era this thesis is focusing on. Duvall and Adam both consider how medico-legal experts constructed their public images and legacies, and this thesis expands on their discussions by considering other experts such as Lynch in New Zealand and Dr Frances McGill from Canada. This study also adds to Adam's analysis of fictional work by British scientists by considering Knight's crime novels and Glaister Jr.'s draft fictional plots. Another recent academic text which explores the development of crime investigation in England is Burney and Neil Pemberton's *Murder and the Making of English CSI*. They also consider the controversies surrounding the Evans-Christie case in the last chapters of their book.[48] This thesis aims to expand on these discussions from the perspective of how medico-legal experts themselves dealt with close public scrutiny of their work.

Very little work has been done on tracing the history of forensic medicine and forensic science in New Zealand and Canada, except as part of a bigger project. Much of the information on the history of forensic pathology in countries outside Britain is autobiographical. For example, in *A Life in Two Lands,* Dr Timothy Koelmeyer comments on his training as a pathologist in New Zealand in the late-twentieth century. W. G. M. Hughson and A. J. Ellis's *A History of Chemistry Division* traces the origins of the modern forensic laboratory in New Zealand, but this book is more of a record of the people who worked in the Chemistry Division of the Department of Scientific and Industrial Research and the types of work undertaken by them, than a critical volume on the history of forensic science.[49] Similar autobiographical trends are seen in the history of forensic medicine and science in Canada, such as Douglas Lucas's *A Life of Crime*.[50] While some texts briefly describe the history of forensic science in Canada,[51] there does not seem to be an authoritative work on this topic. Although some books provide an overview of the practices of forensic science and medicine in different

[46] Duvall, 'Forensic Medicine'.
[47] Adam, *A History.*
[48] Ian Burney and Neil Pemberton, *Murder and the Making of English CSI* (Baltimore: John Hopkins University Press, 2016).
[49] W. G. M. Hughson and A. J. Ellis, eds., *A History of Chemistry Division* (Wellington, New Zealand Department of Scientific and Industrial Research, 1981).
[50] Douglas M. Lucas, *A Life of Crime: My Career in Forensic Science* (Boca Raton, FL: CRC Press, 2019), https://books.google.co.nz/books?id=RVlxDwAAQBAJ&printsec=frontcover&dq=forensic+science+canada+history&hl=en&sa=X&ved=0ahUKEwj148bA76HjAhUEfSsKHWcsBvwQ6AEIRTAF#v=onepage&q=forensic science canada history&f=false.
[51] See for e.g. Anny Sauvageau and Graham R. Jones, 'Forensic Sciences in Canada', in *The Global Practice of Forensic Science*, ed. Douglas H. Ubelaker (Chichester, England: Wiley Blackwell, 2015), pp. 29-37, https://ebookcentral.proquest.com/lib/canterbury/reader.action?docID=1895561&ppg=383.

countries, no text primarily compares the advances in forensic medicine within the Commonwealth countries. Tal Golan explores the development of modern scientific experts in England and the United States.[52] Among more geographically diverse texts, Watson surveys the progress of medical jurisprudence across Europe and the United States,[53] while Douglas H. Ubelaker edited an encyclopaedic volume canvassing the practices of forensic science and forensic medicine across 28 countries. More recently, *Global Forensic Cultures*, a collection of articles edited by Burney and Christopher Hamlin, explores different practices of forensic science across different continents.[54] By bringing together more primary resources, this thesis goes beyond the existing literature by discussing the histories of forensic medicine in New Zealand and Canada in detail and subjecting them to greater critical analysis.

While there is limited academic scholarship on the history of forensic medicine, it is a subject which has received more coverage within the popular genre of true crime. Most of the true crime texts have been written by journalists, interested amateurs or professional investigators, which means the quality of research and writing styles vary widely. For example, Colin Evans' writing about the Truscott case leans towards anecdotal narratives,[55] which is very different from Julian Sher's critical appraisal of every aspect of the case.[56] Even then, the parts of the cases emphasised by true crime writers tend to be the brutality of the crime, or the personality of the criminals, rather than the scientific or the technical features of the case. Some popular true crime texts are similar to newspapers and novels in that they aim to appeal to the average reader, so they also tend to sensationalise the crimes and the subsequent investigations.[57] Some of the authors might have personal agendas in the stance they take in their work. John Eddowes exemplified this when he opened his book *Two Killers of Rillington Place* by calling his late father Michael Eddowes, who openly supported Evans' innocence, a 'fantasist' and 'liar'.[58] These texts are not objective because they are written to garner support for the authors' own points of view, so the authors tend to overstate facts in favour of their preferred perspectives and downplay unfavourable information. This can be seen in Ludovic Kennedy's *10 Rillington Place* and LeBourdais' *The Trial of Steven*

---

[52] Tal Golan, *Laws of Men and Laws of Nature: The History of Scientific Expert Testimony in England and America* (Cambridge: Harvard University Press, 2004).
[53] Katherine Watson, *Forensic Medicine in Western Society: A History* (Oxon: Routledge, 2011).
[54] Ian Burney and Christopher Hamlin, *Global Forensic Cultures: Making Fact and Justice in the Modern Era* (Baltimore: John Hopkins University Press, 2019).
[55] Colin Evans, *A Question of Evidence* (Hoboken, New Jersey: John Wiley and Sons, 2003).
[56] Sher, *Until You Are Dead*.
[57] See, e.g., Neil Root, *Frenzy! Heath, Haigh and Christie: The First Great Tabloid Murderers* (London: Preface Publishing, 2011).
[58] John Eddowes, foreword to *Two Killers of Rillington Place* (London: Little, Brown, 1994), pp. ix-xi.

Truscott during the twentieth century, both of which resulted in intense public discussions about whether miscarriages of justice had occurred and their implications. LeBourdais clearly stated in the foreword of her book that she aimed to tell Truscott's story from the defence's point of view.[59] While many writers have analysed the Truscott and Evans-Christie cases in extensive detail over the years, this thesis takes a new approach by comparing the implications these cases had on the image of forensic medicine within the British Commonwealth.

Anthologies which canvass accounts of true crime are often organised according to countries, eras, or themes. However, even where the authors are not actively calling for judicial inquiries, they still have other goals which might affect the way they delineate the cases. This is evident in John Eddleston's collection of miscarriages of justice in Britain,[60] and Malcolm Brown and Paul Wilson's study of Australian and New Zealand cases where forensic science played a significant role in the judicial outcomes.[61] The objective of those texts is to demonstrate defects in the justice and investigative processes. Other types of texts that recount true crime are biographies and autobiographies of scientists who were involved in the investigations. These texts have the benefit of being more focused on the scientific aspects of the case. However, other than in critical texts about Spilsbury or in the context of criticising opposing arguments in a particular case, the medico-legists' work has not been seriously challenged in the existing literature. This could be because the medico-legists are not predisposed to criticise their own work, and the passage of time means that there are fewer interested parties who are keen to reopen investigations. Robin Odell covered five forensic experts' lives, but does not offer his opinions as to the correctness of the experts' findings.[62] This thesis subjects some of the reputable experts' findings and evidence to closer scrutiny in order to demonstrate how medico-legists responded to potential crises in forensic medicine and protected its image.

The ways in which medico-legists used investigations of crime to promote the perception of forensic medicine is considered in Chapter One. They built an image where forensic medicine was indispensable to successful investigations of crimes and prosecution of criminals. Chapter Two discusses how scandals in forensic medicine affected its reputation and evaluates how successful medico-legists were in maintaining a positive image when faced with potential scandals. It is argued

---

[59] Isabel LeBourdais, foreword to *The Trial of Steven Truscott* (London: Victor Gollancz, 1966), p. 12.
[60] John J. Eddleston, introduction to *Blind Justice: Miscarriage of Justice in Twentieth-Century Britain?* (Oxford: ABC-CLIO, 2000), p. xiv.
[61] Malcolm Brown and Paul Wilson, *Justice and Nightmares: Successes and Failures of Forensic Science* (Kensington, New South Wales: New South Wales University Press, 1992).
[62] Robin Odell, *Medical Detectives: The Lives and Cases of Britain's Forensic Five* (Stroud: The History Press, 2013).

that the adversarial legal system normalised opposing scientific theories, and medico-legists tended to present a united front where there was doubt about the scientific evidence. This means forensic medicine's image of reliability is somewhat inflated, and pressures for reforming forensic medicine came from elsewhere during the twentieth century. Chapter Three examines how changes were achieved within forensic medicine during the twentieth century, and finds other factors such as general concerns about the inadequacy of crime detection and successful usage of scientific techniques in solving crimes were the more effective incentives for change. While medico-legists were successful in maintaining a positive image under the pressures of potential scandals within forensic medicine during the mid-twentieth century, forensic medicine was ultimately a casualty of its own unassailable image because reasons for comprehensive reforms were largely ignored until DNA testing exposed the field's shortcomings.

Chapter One: Medico-legists in the media

During the twentieth century, medico-legists distanced forensic medicine from the 'beastly sciences'[1] of the previous century and transformed their discipline into a respectable one in which practitioners displayed both Holmesian intelligence and the enigmatic power of magicians. To achieve this they utilised homicide investigations. As the police and the courts began to rely on scientific evidence to determine the guilt of suspects and defendants, medico-legists positioned themselves as indispensable members of crime investigations. They featured in newspaper accounts of major cases, and produced writings about their fruitful investigations to promote the successes of their work. Some practitioners also wrote fiction based on aspects of true crime to showcase the powers of forensic medicine. By considering prominent medico-legists featured in British, Canadian and New Zealand cases, this chapter expands on existing secondary literature on media portrayals of pathologists and their writings. These discussions provide the background to Chapter Two, which explores the ways medico-legists approached potential scandals in forensic medicine.

The medico-legist's place in crime investigations

Pathologists came to play a key role in the coronial system, which originated in Britain. Coroners perform the official function of conducting inquests and passing verdicts in cases of suspicious or sudden deaths.[2] New Zealand inherited this system directly, while Canada adopted the coroner system in the majority of its states.[3] Although pathologists have not been officially given special statuses as witnesses in inquests, their expertise and routine appearances have given them more authority and respect than other laymen witnesses. Knight points out that coroners look to the pathologist to confirm the cause of death,[4] and the coroner usually reaches a verdict that is consistent with the pathologist's opinions. New Zealand and Canada also inherited the concept of open justice from Britain. This is the idea that judicial proceedings should be transparent,[5] so criminal proceedings have been open to the public and journalists as a general rule. The universal deference shown to the pathologists during the mid-twentieth century is reflected in newspaper

[1] For e.g. 'Falkirk', *Stirling Observer,* February 20, 1862, 3.
[2] Knight, *Murder, Suicide or Accident* draft, pp. 17-21; Watson, *Poisoned Lives*, p. 154.
[3] Sauvageau and Jones, 'Forensic Sciences in Canada', 31.
[4] Knight, *Murder, Suicide or Accident* draft, p. 21.
[5] Matthew Hale, *History of Common Law of England,* 3rd ed. (London: E. and R. Nutt, and R. Gosling (assigns of E. Sayer) for T. Waller, 1739), pp. 253-255, https://heinonline-org.ezproxy.canterbury.ac.nz/HOL/Page?collection=beal&handle=hein.cow/hclamat0001&id=261&men_tab=srchresults.

reports. Unlike the coroners who were often defined by their office, British pathologists like Camps and Simpson, for example, were usually mentioned by name even when the cause of death was undisputed.[6] This emphasis seems to hint that the pathologists' work and personalities superseded that of the coroner, as they had significant influence on what the coroner's verdict would be.

Medico-legists came to occupy a crucial position in suspicious death investigations, which enabled them to demonstrate the invaluable assistance their specialty provided. Where violent crime occurred, pathologists and scientists provided important information that was essential to catch the perpetrator, such as the identity of the victim, time and manner of death. This helped the police to make decisions about the direction of the investigation and the lines of inquiry to pursue.[7] In the case of Dr Buck Ruxton (England, 1935), for example, the decaying body parts found among the Moffat ravines had to be identified and assembled to provide number of victims, sex, approximate height, age, and date of death to match missing persons reports.[8] The identification of the victims was crucial to tracing Ruxton and disproving his explanation for the absences of his wife and maid. This close collaboration between the police and the pathologist in Britain appears to continue later into the twentieth century, when Knight's novels portray the police relying on the conclusions of pathologists to narrow down the time of death and possible suspects.[9] Similar collaborations are evident in New Zealand throughout the Bayly case, where Bayly was accused of murdering his neighbours Samuel and Christabel Lakey.[10] Although the Bayly case's significance is undisputed in most of its contemporary accounts, it has not been discussed in recent academic literature or compared to cases outside New Zealand. The police officers' and the pathologists' testimonies in that case formed a complete narrative from the finding of burnt bone fragments to piecing together a partial skull.[11] Cooperation between the police and scientists was also seen in Canada, as the Attorney-General of Ontario, Arthur Wishart, publicly advocated for the police to take advantage of scientific methods of detection in the course of their work during the mid-twentieth century.[12] The measurable, provable and rational basis makes science an attractive way to provide justification for police action. Even when the guilt of the perpetrator is clear-cut, forensic medicine provides support for the official version of the crime, and a way to ensure that the right person is punished.

---

[6] 'Driver was in Good Health', *Times,* October 31, 1952, 3.
[7] See for e.g. Simpson, *Forty Years*, pp. 58-61.
[8] Chief Constable of Dumfriesshire Constabulary to John Glaister Jr., October 8, 1935, GB 0248 GUA FM/2A/25/5, RDFMS/UG; Report entitled 'Description of the Girl Rogerson Missing from Lancaster Received by Telephone', October 10, 1935, GB 0248 GUA FM/2A/25/6, RDFMS/UG.
[9] See for e.g. Bernard Knight, *The Expert* draft, pp. 23-25.
[10] 'Arrest Made', *New Zealand Herald*, December 5, 1933, 8.
[11] 'Murder Charges', *Press,* June 8, 1934, 16; 'Medical Tests', *Evening Post,* June 9, 1934, 14.
[12] 'Wishart Sees More Use of Science by Police', *Ottawa Citizen*, July 6, 1966, 14.

Medico-legists also enjoyed an esteemed status as expert witnesses in the criminal justice system. In the English case of Folkes v Chadd in 1782, Lord Mansfield set scientific experts apart from ordinary witnesses by allowing them to provide opinions which were not based on their direct experience of the case in question.[13] As a new English common law development, this case also had significant influence on common law within the British Empire. When a specific area of the investigation falls into the medico-legist's expertise, this means the medical experts are in a special position in court to provide evidence that other witnesses could not express. While some individuals' appointments by the government might have made their opinions seem more trustworthy, it was the experts' experiences or reputations within the courtroom which made their evidence more persuasive. In an article about the state of the forensic sciences in Canada in 1960, David Francis noted that 'the wide background of experience in [the scientists'] particular field' meant their evidence would 'stand up for its worth no matter how searching the cross-examination'.[14] It is not unusual for pathologists to quantify their experience by the number of post-mortem examinations they have performed. During the Bayly trial, for instance, Dr Walter Gilmour, a New Zealand pathologist, estimated that he had performed about two to three thousand autopsies at that point of his career.[15] Through the process of open justice in the courts, the medico-legists were in an excellent position to highlight their experience and expertise in the courtroom, and engage with the public to explain how forensic medicine helped solve crimes.

Medico-legists and newspapers

As scientific aids became an integral part of crime investigations, inquests and court proceedings, the newspapers began to project the impression that medico-legists were crucial to the justice process. The police, however, did not readily embrace new scientific techniques and technologies when they were first introduced. Adam argues that the police were wary of the negative implications of scientific innovations on their working lives, such as the organisational changes required to accommodate new technologies. There was scepticism in the police force about untested scientific methods which were not always regarded as trustworthy alternatives to traditional policing measures. The positive publicity about scientific techniques or technologies helped with driving reforms to modernise the police force and encouraging acceptance of the new

[13] Folkes v. Chadd, (1783) 3 Doug. K.B. 157, 159.
[14] David Francis, 'Science's Hidden War on Crime', *National Post*, May 28, 1960, 25.
[15] 'Doctor's Evidence', *New Zealand Herald,* June 9, 1934, 13.

approach to policing.[16] The press arguably first highlighted the miraculous powers of science to achieve justice in the reporting of the Crippen case. Human remains, suspected to be those of Crippen's wife, were found in the cellar of Crippen's home. The police notably used wireless telegraphy to contact the captain of the ship that Crippen had boarded to escape England and managed to apprehend him when the ship docked.[17] British, Canadian and New Zealand newspapers followed Crippen's capture and trial enthusiastically. The *New Zealand Herald* ran almost daily updates on the development of the murder mystery, the capture of Crippen and the trial from July to September 1910.[18] During the trial, there was debate about whether the marks on a piece of skin found in Crippen's cellar was an abdominal scar, which was consistent with Mrs Crippen's past surgery for ovarotomy, or a surface crease.[19] A young pathologist named Bernard Spilsbury gave evidence confirming that the mark was a scar after microscopical examination. He came to this conclusion because there were no glands on either side of the mark, which is characteristic of scar tissue.[20] Spilsbury's evidence was recounted in a Canadian newspaper, which described him as an 'eminent English pathologist'.[21] This trial launched Spilsbury's career as a 'celebrity pathologist'[22] and earned the public's admiration for the medico-legist's crucial role in assisting the state in crime detection.

While it is unclear whether pathologists gave journalists any active encouragement, the journalists followed the pathologists' progress with avid interest during later twentieth-century investigations. This is evident in the Evans-Christie case. In 1949, Timothy Evans was accused of murdering his wife Beryl and his child Geraldine, whose bodies were found in the wash house of their flat. He was subsequently convicted of murder upon his own confessions and the evidence of his downstairs neighbour John Christie. Three years later, bodies of multiple women were found in the flat occupied by Christie, and he was discovered to be a serial killer who had been murdering women for years. Doubt about Evan's conviction intensified when Christie confessed to killing Mrs Evans, which led to Mrs Evans and Geraldine's bodies being exhumed to determine whether there was any truth in Christie's claims.[23] This exhumation made front-page news in several newspapers, all of which mentioned the presence of three pathologists, Camps, Simpson and Dr Donald Teare (1911-1979). They described Simpson 'going in and out of the screened space taking instruments from his leather

[16] Adam, *A History,* p. 121-122.
[17] Ibid., p. 94, 96.
[18] For e.g. 'A London Sensation', *New Zealand Herald,* July 18, 1910, 5.
[19] Odell, *Medical Detectives*, p. 16; 'The Crippen Case', *Times,* September 15, 1910, 3.
[20] 'The Crippen Case', *Times*, September 17, 1910, 3.
[21] 'Crippen's Victim Whether Man or Woman Was Poisoned', *Watchman-Warder*, September 15, 1910, 7.
[22] Burney and Pemberton, 'The Rise and Fall', 1319.
[23] Odell, *Medical Detectives*, pp. 148-149.

bag' at the cemetery,[24] and 'Dr Camps remained at the mortuary for another half hour in conference with police officers and other officials.'[25] A similar style of reporting is evident in the Bayly case, where one New Zealand newspaper confirmed that '[in] the past week… [the] pathologist at the Auckland Hospital, Dr Walter Gilmour, has been busily engaged on testing the material.'[26] Canadian newspapers also showed some interest in the pathologists' work during investigations. In one newspaper report, the reporter not only emphasised the pathologist's job as pivotal to the identification of two skeletons and the solving of their murders, but the progress of identification, through matching the characteristics of the skeleton with missing persons' records and dental records, was also noted.[27]

Since reporters were allowed into the public gallery in the Court during inquests and murder trials, the pathologist's evidence was publicised as a matter of course when reporters were present. This is seen in the newspaper reporting of the Bayly case, where the utterings of the pathologists were quoted almost word for word.[28] The pathologists' testimonies were transmitted to the public through several different newspapers under headings such as 'Pathologist's Opinion'. The keywords from their evidence like 'Drowning After Blows' and 'Charred Human Bones' were also made into subheadings.[29] These are comparable with newspaper headings for pathologists' evidence in Canada such as 'Torn Artery Caused Death Say Doctors at Murder Hearing.'[30] It is clear that the reporters chose the more salacious and gruesome details to report, and the pathologist's evidence was often both. Similar reporting style is seen in other jurisdictions. In the Christie case, Camps' evidence about how the bodies were found and how the victims were murdered was also recounted in great detail.[31] The pathologists' evidence forms a crucial part of the prosecution case to confirm that death occurred, and to provide conclusions pointing to the murderer. While it is not evident whether pathologists always welcomed such attention, their place in the investigative and justice processes made it inevitable that newspapers would closely associate them with the facilitation of justice.

As Duvall points out, since it was the writers and editors who ultimately decided on the angle they wished to take in any story, the pathologists did not have full control of how they or forensic

[24] 'Mrs Evans and Baby Exhumed', *Liverpool Echo*, May 18, 1953, 7.
[25] 'Police Exhume Bodies of Murdered Mother, Child', *Shields Daily News*, May 18, 1953, 12.
[26] 'Ruwaro Mystery', *New Zealand Herald*, November 21, 1933, 10.
[27] 'Skeleton under Hedge May Link Two Murders', *Liberal,* May 23, 1968, 10.
[28] See for e.g. 'Doctor's Experiment', *New Zealand Herald,* June 8, 1934, 13.
[29] 'How Mrs Lakey Died', *New Zealand Herald*, January 25, 1934, 13.
[30] 'Torn Artery Caused Death Say Doctors at Murder Hearing', *Stouffville Tribune*, January 24, 1957, 8.
[31] 'Christie in Court on Four Murder Charges', *Times*, April 23, 1953, 5.

medicine were portrayed in newspapers.[32] This meant the way forensic medicine or science were described in the press was not always what the medico-legists would have desired. While Duvall speaks from the British context, his comment is applicable to Canadian media portrayals of forensic medicine. This is seen in the case of Father Adélard Delorme (Canada, 1922), who was accused of shooting and killing his brother. Although this was the first case where evidence regarding ballistics and firearms was used in a major trial in North America, many of the newspapers chose to focus on more salacious elements such as the defendant's sanity and the scandal of a priest being accused of murdering his half-brother.[33] Delorme's eventual acquittal meant the main medical and scientific witness, Dr Wilfrid Derome, and his intended narrative of science vanquishing the criminal were not presented as effectively as in the Crippen or the Bayly cases. The conviction of the defendants led to extensive commentaries about the powers of science in the Crippen and the Bayly cases,[34] which was not evident in the Delorme case to the same extent. While the press might ignore significant medico-legal evidence in their coverage of cases, they might also exaggerate the amount of criminal work the pathologist was involved in. This is apparent in Knight's 1970 comment: '[the] popular image of the doctor presented by the Fleet Street journalist is projected to the public as someone who deals with bloody murder from nine until five every day – the fact that he… [spends] his time… in pursuing some highly non-criminal research, never gets across'.[35] Regardless of the tenor of the portrayals, reports of suspicious death investigations and the public nature of the criminal court process continued to publicise and reinforce the unique status of scientists in criminal investigations and the Court, linking medico-legists with the justice system.

As they featured in newspaper reports of crime investigations and trials, the pathologists constructed their public personae in a way that enhanced forensic medicine's reputation. Spilsbury revolutionised the image of the pathologist by presenting himself as the epitome of a respectable English gentleman-doctor. He was a handsome, well-dressed man who '[carried] a small black old-fashioned bag.'[36] His public persona reached far-flung corners of the British Empire, which was seen in photographs and a sketch of Spilsbury in the *Winnipeg Tribune's* feature article in 1934.[37] While most professional men probably dressed well in this time period, Spilsbury's impeccable appearance

[32] Duvall, 'Forensic Medicine', 211.
[33] See for e.g. 'New Trial for Abbe, No Verdict by Jury', *Northern Advance*, July 26, 1923, 7.
[34] See for e.g. 'Notes and Comments', *Times and Guide,* August 5, 1910, 1; 'Great Trifles', *New Zealand Herald*, June 25, 1934, 14.
[35] Knight, *Murder, Suicide or Accident* draft, p. 13.
[36] 'Pathology Clash in Setty Case?', *Northampton Chronicle and Echo*, January 7, 1950, 1; Burney and Pemberton, *English CSI*, p. 92.
[37] John Steele, 'Spilsbury, Nemesis of Murderers', *Winnipeg Evening Tribune,* September 15, 1934, 3.

was often remarked upon both at the time and in later literature.[38] This image of the pathologist is echoed by newspaper pictures of P. P. Lynch, a Wellington pathologist in 1930s New Zealand, in which he was photographed wearing a bowler hat, waistcoat and jacket.[39] While none of the newspapers considered here specifically described Lynch's appearance, Lynch obviously took care to dress well. His picture reinforced the pathologist's image as a professional man and that he should be respected as such. Spilsbury utilised the opportunities of public exposure presented by his role in suspicious death investigations, and created a successful image as a scrupulously impartial scientific expert. He enjoyed a strong reputation with the public after the Crippen case, and was often credited with swaying juries in major criminal trials with his charisma. During the trial of Donald Merrett (England, 1927), Spilsbury was, perhaps not so accidentally, called 'Saint Bernard' by the defence counsel.[40] The celebrity of Spilsbury paved the way for other pathologists who enjoyed similar reputations and appeared in major criminal trials during the twentieth century. For instance, Camps appears to have emulated Spilsbury's glamour and drew on allusions to Sherlock Holmes by smoking a pipe in his publicity picture.[41] Camps also deliberately styled himself as the 'English Maigret'. In a newspaper special promoting Camps' biography, his biographer noted that Camps 'even copied some of the mannerisms of the actor Rupert Davies',[42] who portrayed Maigret in the BBC adaptation of the stories featuring the popular fictional French police detective during the 1960s.[43] On the other hand, Simpson openly told reporters that he 'prefers the title "professor" rather than "doctor"'.[44] This had mixed results among the journalists because some newspapers did consistently refer to Simpson as a professor while others continued to call him a doctor.[45] Although Simpson was proud of his connection with Guy's hospital, it is more prestigious to be referred to as a professor of a university, because it has connotations of both intellectual prowess and impartiality. In doing so, he also distinguished himself from hospital pathologists, who did not specialise in conducting post-mortem examinations in cases of suspicious deaths.[46] Such cultivated personae strengthened the impression that the pathologist's work in pursuit of justice was effective and their continued involvement in crime investigations was both desirable and necessary.

---

[38] 'Scenes at Bungalow Trial', *Hull Daily Mail,* July 19, 1924, 5, quoted in Burney and Pemberton, *English CSI*, p. 92.
[39] 'Doctor's Evidence'.
[40] Simpson, *Forty Years,* p. 30.
[41] 'The House of 5 Dead Babies', *People*, March 2, 1975, B5; Adam, *A History,* p. 173.
[42] 'The House of 5 Dead Babies'.
[43] 'Maigret', IMDB, accessed January 18, 2020, https://www.imdb.com/title/tt0159178/.
[44] 'Truscott Case: British Expert Supports Crown'.
[45] Compare Duart Farquharson, 'Truscott Hearing Resumes: Experts Clash on Death Time', *Province,* October 12, 1966, 10; and 'U.K. Expert Challenges Truscott Case Defence', *Leader-Post*, October 12, 1966, 1.
[46] Knight, *Murder, Suicide or Accident* draft, p. 5.

As a counter-point to Spilsbury's urbane presentation, the newspaper image of Smith was that of a hands-on scientist when he was promoting his autobiography during the 1950s. In a publicity picture, Smith was dressed in a white lab coat conducting experiments with test tubes.[47] This distinguished him as a scientific expert and supported the headline that Smith's tests 'proved [the defendant] innocent', emphasising his experiments in the Peter Queen case (1931, Scotland) as superior to the unreliable memories of the policeman who testified that Queen confessed to the murder of his girlfriend.[48] Smith's adoption of the archetypal scientist image could be a reference to his humble beginnings as a chemist in New Zealand and the hard work behind his later achievements, which might have made him more relatable and trustworthy to the average person at the time his autobiography was published.[49] Smith's persona supported his conclusions as logical and scientifically sound, and reinforced the image of forensic medicine as a modern and dependable discipline. Medicine was linked to crime detection when Smith was labelled 'the greatest scientific detective of our time'.[50] The image of the crime-solving scientist was so effective that a similar superlative was also given to Dr Milton Helpern, an American expert who testified in the Truscott appeal in 1966.[51] While Adam argues that the image of a hands-on scientist indicates 'masculine, scientific and epistemic authority', this clearly influenced a 1955 publicity picture of a female Canadian pathologist, McGill, who was photographed examining a human skull in her hand, with a microscope in the foreground.[52] Knight also utilised both the glamourous persona and the scientist in the mid to late-twentieth-century newspaper media. He was photographed wearing a suit, but probing at a partial skull in interviews about his fictional works.[53] Although Knight's personal appearance resembled a businessman, the act of holding and examining the skull reminded the readers that he was a working pathologist, which was a major marketing point for his novels. While earlier studies by Duvall, Burney and Pemberton have tended to focus on the images of the British medico-legists who were active during the early twentieth century, it is shown here that other later British, New Zealand and Canadian pathologists also consciously constructed their public personae to project how they wished to be perceived or remembered.

---

[47] Sydney Smith, 'Condemned by One Word Yet My Tests Proved Him Innocent', *People*, March 1, 1959, GB 0248 DC 403/2/6/6, JGP/UG.
[48] Ibid.
[49] Duvall, 'Forensic Medicine', 237-238.
[50] Sydney Smith, 'They Hanged this Innocent Man', *People*, February 15, 1959, GB 0248 DC 403/2/6/6, JGP/UG.
[51] Jerry E. Bishop, 'The World's Greatest Medical Detective', review of *Autopsy: Memoirs of a Medical Detective,* by Milton Helpern and Bernard Knight, *Wall Street Journal*, 1977-1980, GB 1239 454/1/7/1, BKP/UC.
[52] Frances McGill and David Willock, 'She Solved Murders in the Morgue', *Winnipeg Evening Tribune*, October 22, 1955, 24.
[53] 'Scientist on the Murder Trial', 1971-1975, GB 1239 454/6/26/2, BKP/UC.

Medico-legists also gained more control in delineating the role of forensic medicine when they participated in interviews or wrote commentaries about crime investigation processes. Knight has clearly viewed forensic medicine and science as vitally important in combating crime. In an interview about his novels that are partially based on true events and real settings, Knight disputed that crime was solved only by one or two policemen and said '[a] lot of the work is work that solves the cases…. it's the ordinary routine forensic work that gets results'.[54] The short title of this article is 'Home Office Pathologist is the man to solve it'.[55] This statement not only reflects Knight's double identity as a novelist and a pathologist, it could also be read as a declaration that pathologists' involvement is necessary in crime investigations. He described the role of science in crime detection as 'the Cinderella of the law enforcement machine', but, despite setbacks, '[the] versatility of the forensic scientist to tackle any new problem, however bizarre, is now almost a legend.'[56] Medico-legists also publicly commented on social issues based on their experiences in suspicious death investigations. This is evident when Camps later advocated for offenders to attend treatment centres for alcohol dependency where alcohol was a factor in their offending. A reporter who wrote about the initiative seems to suggest that Camps was qualified to make such comments because he 'has been pathologist in many murder cases'.[57] Lynch also participated in the debate over capital punishment in his capacity as a pathologist in New Zealand. He used his experiences in murder trials to make his case in the Joint Parliamentary Committee for the return of the death penalty.[58] These kinds of commentary around the delivery of justice reinforced the view that forensic medicine could be used to create a safer society.

Some pathologists also wrote newspaper features about true crime cases, which gave them greater discretion to emphasise aspects of forensic medicine or the pathologists' views of the discipline. Even so, medico-legists were still not in full command of how the final newspaper account turned out, as Smith later wrote to *The People* expressing his reservations about how Spilsbury was portrayed in the series attributed to Smith. However, Smith was still involved in the process of producing the articles; it is arguable that he was still responsible for the underlying themes of the Queen case as described in the serials.[59] In 1959, Smith described the Queen case as a miscarriage of justice caused by the incompetency of the police, and science revealed the truth that the victim

[54] 'A Case of Double Identity', 1965-1972, GB 1239 454/6/26/1, BKP/UC.
[55] Ibid.
[56] 'The Scientists Who Help to Fight the Crime Battle', *Journal*, June 3, 1966, GB 1239 454/6/26/1, BKP/UC.
[57] Geoffrey Wansell, 'Compulsory Centres for Alcoholics Suggested', *Times,* March 31, 1971, 4.
[58] 'Doctors Give Evidence to Joint Committee on Capital Punishment', *Gisborne Herald,* October 19, 1950, 8.
[59] Duvall, 'Forensic Medicine', 211.

committed suicide. He did not mention any prosecution medical witness in the newspapers.[60] In contrast, when Glaister Jr. wrote about the Queen case in 1935, he framed the case as a confrontation between his father John Glaister Sr., the prosecution witness, and Spilsbury. Glaister Jr. seemed to criticise Spilsbury for closing his mind to any possibility other than suicide, and the summary of scientific arguments on both sides gave the article a more balanced tone compared to Smith's article.[61] In doing so, Glaister Jr. presented his father as the impartial medico-legist who won the day when Queen was convicted of murder. In comparing Smith's and Glaister Jr.'s accounts of the Queen case, this thesis adds to Duvall's analysis by showing that both portrayals of the Queen case promoted the idea that forensic medicine's involvement in crime investigations was essential to an equitable outcome. The same message was communicated by similar types of newspaper features that were also published in Canada. McGill was another pathologist who recounted her memorable cases with the help of a journalist. In all three stories, McGill confirmed the identities of the decomposed bodies and cause of death by shooting, which contributed to the conviction of the murderers.[62] They supported the same narrative that forensic medicine was crucial to the administration of justice, and McGill's article reflects the existence of this belief in Canada.

Medico-legists and their non-fictional writings

Journal articles

Medico-legists wrote about investigations in which they had been involved in a conscious attempt not only to portray their work in the best light possible, but also to encourage other professionals within the criminal justice process to use their services. Some of the medico-legists' journal articles were seen in the *Police Journal*, where scientists attempted to explain their work in a more practical manner to investigators. For example, Camps wrote an article about science and criminal investigation, emphasising that 'various branches of science and medicine' could all be used in investigations.[63] Camps did not use technical language in this article, and explained the innovations in ways which were useful for the police so they knew when to utilise science to their best advantage and what kind of techniques could be used. He discussed advances in forensic medicine such as the use of serology to identify rapists from vaginal swabs of the victim.[64] While historians

[60] 'Condemned by One Word'.
[61] John Glaister Jr., 'The Trial of Peter Queen: When Spilsbury and Glaister Differed', *People's Journal*, December 14, 1933, GB 0248 DC 403/2/6/8, JGP/UG.
[62] McGill and Willock, 'She Solved'.
[63] Francis E. Camps, 'Science and Criminal Investigation', *Police Journal* 45, no. 2 (April 1972): 104.
[64] Camps, 'Science and Criminal', 106

have focused on medico-legists' efforts to convey forensic knowledge to law enforcement personnel in the British context, there has been no discussion in recent literature that compares British, Canadian and New Zealand medico-legal journal articles to discover common trends and differences. Although there was no equivalent journal to the *Police Journal* in Canada and New Zealand, contribution of articles by Canadian and New Zealand police officers indicate that the *Police Journal* had a wide reach in the British Commonwealth.[65] However, medico-legists from Canada and New Zealand tended to write to their national law journals instead. In Canada, a pathologist wrote an article about obtaining and presenting evidence in sexual assault cases for the August 1961 issue of *Criminal Law Quarterly*.[66] He was clearly mindful that his readers were lawyers, because he identified all the possible medical evidence which would fit into the required legal elements to prove rape throughout the article. His experience was evident when he described common marks of violence which would indicate the victim was restrained or had resisted, like the imprints of the rapist's fingers on the victim's arms 'in a bilateral, symmetrical distribution'.[67] Similarly, Lynch wrote papers about medico-legal issues which he presented at law conferences and published articles in the *New Zealand Law Journal.*[68] His article about blood tests in driving prosecutions was also clearly directed at lawyers. He cited court cases from Canada and the United States to support his arguments, which would have been convincing to lawyers because he used a form of evidence they would have been familiar with.[69] These types of articles not only provided basic knowledge for the police and lawyers about the potential uses of science, but also reinforced the value of forensic medicine in assisting police.

Other than their attempts to educate those in law enforcement, medico-legists also wrote journal articles in scientific journals regarding their findings and how they used science when they were involved in successful prosecution or defence of cases. While it is possible that scientific work was emphasised over other factors which may also have helped in solving crimes, these journal articles often detail the scientific experiments and explanations for other scientists to learn from. This is seen in Camps' account of the Emmett-Dunne case, which was significant to Camps because 'it is, as

---

[65] See for e.g. F. A. Gordon, 'Coincidence', *Police Journal* 39, no. 11 (November 1966): 575-584; C. H. L. Sharman, 'Narcotic Control in Canada', *Police Journal* 3, no. 4 (October 1930): 535-549, https://doi.org/10.1177/0032258x3000300406.
[66] J. H. Fisher, 'Obtaining and Presenting Evidence in Sex Cases', *Criminal Law Quarterly* 4, no. 2 (August 1961): 150-159.
[67] Ibid., 155-156.
[68] See for e.g. P. P. Lynch, 'The Hospital, the Public and the Law', *New Zealand Law Journal* 30, no. 9 (May 1954): 118-122.
[69] P. P. Lynch, 'Blood Tests in Motor-Vehicle Prosecutions', *New Zealand Law Journal* 32, no. 12 (July 1956): 184-185.

far as can be ascertained, the first description of a murder using a method of unarmed combat.' Emmett-Dunne reportedly found the body of a sergeant, who appeared to have committed suicide by hanging himself. However, suspicions were raised when Emmett-Dunne married the sergeant's widow shortly after. Camps' article discussed the experiments they carried out to show that the fracture in the sergeant's larynx could not have been caused by hanging. Their investigations ultimately demonstrated that the victim died from a blow to the neck. This evidence led to Emmett-Dunne's confession that he hanged the body as a ruse, and he was ultimately convicted of murder.[70] Compared to articles published in non-scientific journals, Camps not only provided more technical details, he also framed the article as a scientific report of findings. He began with setting out the background to the investigation, then described the experiments carried out to prove his hypothesis and the conclusions. The practice of publishing articles about successful medico-legal cases is also seen in New Zealand. It seems Lynch was regularly requested by the editors to contribute to the medico-legal section of the *New Zealand Medical Journal* because he also wrote about notable cases that he was clearly not professionally involved in, such as matters of testamentary capacity.[71] However, Lynch seemed to particularly relish in retelling the part he played in the case of Phyllis Freeman (New Zealand, 1942), where a housekeeper poisoned members of her employer's family with strychnine. Lynch and his colleagues were charged with the task of discovering the true cause of death from an exhumed body. His results were later used to disprove the defendant's stories during the trial. Lynch openly acknowledged that his account emphasised the medical aspects of the case.[72] Canadian forensic scientist Dr Noble Sharp also examined the mysterious death of an artist, Tom Thomson, in a journal article. He was involved in the examination of an exhumed skeleton which some believed to be Thomson's. He and his colleagues concluded that the skeleton was not Thomson because he did not match the physical characteristics of the skeleton.[73] Both Lynch's and Sharp's articles also follow the same formulations of scientific reports. These articles published in respectable scientific journals increased the prestige and credibility of the authors themselves, as they were considered authorities on the subject they were writing about. Camps received positive endorsement from fellow medico-legists for the papers he presented to the Medico-Legal Society, which were later published as articles. For example, Teare described Camps' paper on carbon monoxide poisoning as 'excellent' and a gas expert, Mr F. C. Smith, commented that 'it had been a great privilege… to attend and listen to Dr Camps' most interesting paper.'[74] The journal articles also

[70] Camps, 'Emmett Dunne', 156-160, 161.
[71] See e.g. P. P. Lynch, 'Medico-legal', *New Zealand Medical Journal* 50, no. 279 (October 1951): 497-499.
[72] P. P. Lynch, 'Medico-Legal', *New Zealand Medical Journal* 47, no. 261 (October 1948): 456.
[73] Noble Sharpe, 'The Canoe Lake Mystery', *Canadian Society of Forensic Science Journal* 3, no. 2 (1970): 37-38.
[74] Francis E. Camps, 'Carbon Monoxide Poisoning', *Medico-Legal Journal* 18, no. 3 (1950): 82-83.

projected the medico-legist's work as reliable, usually because their conclusions convinced the Courts, which enhanced their reputation as experts and the value of forensic medicine in crime-solving. Lynch's and other medico-legists' articles in the *New Zealand Medical Journal* during the 1940s and 1950s arguably consolidated the value of forensic pathology, as abstracts of papers presented at the annual New Zealand Society of Pathologists began to feature in the journal from 1963 onwards.[75]

Medico-legal case studies

Some pathologists also capitalised on the publicity of certain crimes and published non-fiction books about the cases they worked on. Similar to the innovations discussed in journal articles, the research and experiments that had been undertaken during the course of the investigation could be seen as important contributions to the existing body of medical knowledge. The medico-legists used medico-legal case studies to demonstrate significant new techniques or discuss medical discoveries which could be applied later to new cases. Glaister Jr.'s text *Medico-Legal Aspects of the Ruxton Case* received praise from several medical journals for the innovative scientific techniques they employed to ascertain the victims' identities, the most notable of which was the superimposition of the victim's photograph upon the skull that was found.[76] A reviewer predicted that the book 'is bound to be the constant companion of those who are called upon to perform medico-legal investigations in any important case.'[77] Although the two case studies have not been compared in depth in existing secondary literature, a similar book to Glaister Jr.'s *Ruxton Case* is Camps' *Medical and Scientific Investigations in the Christie Case*. By publishing his team's findings in a book, Camps presented medical discoveries like the surprising stability of carboxy haemoglobin, which is the product of carbon monoxide and red blood cells, in the dead body.[78] The record of the pink teeth present in Mrs Evans' autopsy provided basis for further research by later scientists who studied the phenomenon.[79] At the times they were published, *Ruxton Case* and *Christie Case* further consolidated forensic medicine as a medical specialty in its own right, because they showed other

[75] See e.g. New Zealand Society of Pathologists, 'Abstracts of Papers Presented at Fifteenth Annual Conference', *New Zealand Medical Journal* 62, no. 372 (August 1963): 377-381.
[76] John Glaister Jr. and James Couper Brash, *Medico-Legal Aspects of the Ruxton Case* (Edinburgh: E and S Livingstone, 1937), pp. 144-170.
[77] Review of *Medical-Legal Aspects of the Ruxton Case,* by John Glaister Jr. and James Couper Brash, *Liverpool Medico-Chirurgical Journal*, 1938, GB 0248 GUA FM/5/4/1, RDFMS/UG.
[78] Francis E. Camps, introduction to *Medical and Science Investigations in the Christie Case* (London: Medical Publications, 1953), p. xix.
[79] D. H. Clark and Marion Law, 'Post-Mortem Pink Teeth', *Medicine, Science and the Law* 24, no. 2 (April 1984): 130-134, https://doi.org/10.1177/002580248402400214.

scientists and academics the kind of contributions forensic medicine could make to society. Reviews of *Ruxton Case* designated the book to be a 'memorable record'[80]and an 'outstanding classic' of the medico-legal work undertaken by the authors, which '[criminologists] will have interest in adding… to their library'. [81] Similarly, Glaister Jr. noted Camps and his teams' conclusions about the correct method of estimating height from long bones, and predicted that to the professionals who were 'concerned with medico-legal problems [*Christie Case*] will prove of high value.'[82] Although high-profile murders also occurred in Canada and New Zealand, the pathologists who were involved seemed less inclined to publish medico-legal case studies. This could be explained by the differences between the pathologists' employment situations. Glaister Jr. and Camps were university employees for the majority of their careers,[83] so they might have been more mindful of the need to produce and present research. In contrast, forensic pathologists in New Zealand and Canada, such as Lynch and McGill, were typically employed by the government or hospitals where the emphasis was on practical work.[84]

Like the journal articles discussed above, these case studies also highlighted the applicability of other sciences in the endeavour of crime investigations. Glaister Jr. co-wrote *Ruxton Case* with the anatomist Professor James Brash. One of the reviewers of Glaister Jr.'s book noted that it 'shows to advantage the result of successful team-work between medical jurist, pathologist, anatomist, radiographer, photographer, and various other specialists.'[85] A review of *Christie Case* echoes the same idea when the reviewer stated '[in] the reconstruction and subsequent identification of the two skeletons, the anatomists and the dentists played an indispensable role.'[86] The idea that other scientific and medical specialties could be used in conjunction with forensic medicine placed the latter on the same footing as the established disciplines. It also delineated forensic medicine as a practical and useful area of medicine and its study and practice should be encouraged. In both *Ruxton Case* and *Christie Case*, the distinct specialties represented by separate chapters also demonstrated the importance of teamwork within the scientific aspect of crime investigations, and

[80] Review of *Medico-Legal Aspects of the Ruxton Case,* by John Glaister Jr. and James Couper Brash, *Medico-Legal and Criminological Review* 5, no. 4 (October 1937): 451.
[81] Review of *Medico-Legal Aspects of the Ruxton Case*, by John Glaister Jr. and James Couper Brash, *Juridical Review* 49, no. 4 (1937): 449-450.
[82] John Glaister Jr., 'The Christie Case', review of *Medical and Scientific Investigations in the Christie Case*, by Francis E. Camps, *British Medical Journal* 1, no. 4864 (March 1954): 745.
[83] See for e.g. John Glaister Jr., *Final Diagnosis* (London: Hutchinson, 1964), p. 38.
[84] See for e.g. P. P. Lynch, *No Remedy for Death* (London: John Long, 1970), pp. 13-15.
[85] Review of *Medical-Legal Aspects of the Ruxton Case,* by John Glaister Jr. and James Couper Brash, *The Ulster Medical Journal,* January 1938, GB 0248 GUA FM/5/4/1, RDFMS/UG.
[86] A. K. M., 'Reviews', review of *Medical and Scientific Investigations in the Christie Case,* by Francis E. Camps, *Medico-Legal Journal* 22, no. 2 (1954): 59.

posited the medico-legist as the natural co-ordinator of these efforts as the authors and editors of the books.[87] In doing so, the authors preserved the prominent role they each took in the investigations, which in turn ensured that forensic medicine remained the primary focus of the books and the driver of scientific investigations. This image of a democratic, collaborative team of scientists headed by the pathologist was sustained in Knight's later non-fiction books about forensic medicine. He wrote in his draft of *Murder, Suicide or Accident* that '[the] doctor occupies a small but central position in this framework of law enforcement – indeed, often the very mobilisation of an investigation is at his behest'.[88]

Another way the case studies could be seen as extensions of journal articles is that they could also cater to other professionals, especially those who were involved in the justice system. This goal is well-summarised in a letter from the Chief Constable's office of the Lancashire Constabulary to Glaister Jr.: 'I am sure [a book about the Ruxton case] written by you would be of infinite value, not only to medical men and Police, but to everyone interested in criminal work…' [89] In fact, the law journals tended to be more interested in the case studies than the traditional medico-legal textbooks. For example, a search for reviews of R. W. Fairbrother's *Textbook of Medical Bacteriology*, which was published around the same time as *Ruxton Case*, in HeinOnline's collection of law journals only revealed one that was published in the *Medico-Legal and Criminological Review,*[90] whereas *Ruxton Case* was reviewed in multiple law journals. *Ruxton Case* made a splash in non-medical circles, as it was hailed in the *Scottish Law Review* as 'probably the most brilliant series of scientific investigations in any single case in the history of forensic medicine'.[91] *Ruxton Case* was also positively reviewed in the *Howard Journal* and *Juridical Review.* Similarly, the *Christie Case* was praised in a review in the *Journal of Criminal Law, Criminalistics and Police Science*, indicating interest from law enforcement personnel in this type of work.[92] The achievements of *Christie Case* are such that a reviewer later recognised Camps as the 'world authority' on the subject of exhumed bodies because the book 'is ample proof of his experience in this field'.[93] As these books attracted a

[87] Burney and Pemberton, *English CSI*, pp. 157-158, 168.
[88] Knight, *Murder, Suicide or Accident* draft*,* p. 15.
[89] Chief Constable's Office (Detective Department) Lancashire Constabulary to Glaister Jr., May 15, 1936, GB 0248 GUA FM/5/4/1, RDFMS/UG.
[90] Review of *Textbook of Medical Bacteriology,* by R. W. Fairbrother, *Medico-Legal and Criminological Review* 5, no. 4 (October 1937): 451-452.
[91] 'Literature', review of *Medical-Legal Aspects of the Ruxton Case,* by John Glaister Jr. and James Couper Brash, *Scottish Law Review and Reports of Cases* 54, no. 637 (January 1938): 18, GB 0248 GUA FM/5/4/1, RDFMS/UG.
[92] Ralph F. Turner, 'Police Science Book Reviews', review of *Medical and Scientific Investigations in the Christie Case,* by Francis E. Camps, *Journal of Criminal Law, Criminology and Police Science* 46, no. 5 (1955-1956): 751.
[93] Charles P. Larson, review of *Practical Forensic Medicine*, by Francis E. Camps and W. B. Purchase, *Texas Law Review* 37 (December 1958): 264.

wider audience who were not necessarily scientists, the authors took the opportunity to showcase the success of the investigation in uncovering the truth, and attempted to link science with the pursuit of justice. Camps' book associated science with the justice process, which was reflected in the foreword by the Attorney General, Sir Lionel Heald when he said '[this] remarkable story provides a concrete example of the part which modern science can play in the detection and thus, it may be hoped, in the prevention of crime.'[94] While Heald had to be positive about the book and its contributions in its foreword, his words reflect the book contributors' hope that modern science would be utilised in future crime investigations. The textbooks also publicised successful professional collaborations between the scientists and the police. Glaister Jr. and Brash dedicated *Ruxton Case* to members of the Scottish and English police forces who worked on the case, and said in the preface that '[the] history of the [Ruxton case]… emphasises the high importance of "team work" by medical experts, and of close co-operation between them and the police, in the investigation of intricate murder cases.'[95] This kind of portrayal demonstrates to a wider audience that ideal investigations are not only feasible and achievable, they also ensure efficient and effective delivery of justice.

Although the standard of scientific work carried out in the Ruxton and the Evans-Christie cases remain largely unchallenged to this day, the wider effects of their legacies differed. The scientific breakthroughs of the Ruxton case continued to be discussed in positive terms decades after the crime, when Glaister Jr. corresponded with Nigel Morland, a crime writer, about the Ruxton case in 1957.[96] On the other hand, Camps' book was published around the time of John Scott Henderson's inquiry into the conviction of Evans. Scott Henderson concluded that Evans had killed both Mrs Evans and Geraldine so there had been no miscarriage of justice, but his inquiry and decisions were heavily criticised in the public forum.[97] While Camps' text indicates that Christie probably did not kill Mrs Evans, it did not put to rest some of the controversies about what had transpired in 1949 at 10 Rillington Place. As Burney and Pemberton point out, the popular belief about Evans' execution being a miscarriage of justice persisted and Kennedy's book crystallised this unease into a further official inquiry 16 years after the execution.[98] Rather than being accepted as fact like the scientific conclusions in the Ruxton case, Camps had to continuously defend and justify the conclusions reached by himself and his team over the years. Therefore, while forensic medicine was definitely linked to the justice issue in both cases, the tenor of that overall engagement was very different.

---

[94] Lionel Heald, foreword to *Christie Case,* p. xv.
[95] John Glaister Jr., preface to *Ruxton Case*, p. v.
[96] Nigel Morland to John Glaister Jr., August 5, 1957, GB 0248 GUA FM/5/4/1, RDFMS/UG.
[97] 'Evans Inquiry Begins in Secret Today', *Nottingham Journal*, July 8, 1953, 1; 'Evans Case Shock for Commons', *Daily Mail*, July 30, 1953, 1, 3.
[98] Burney and Pemberton, *English CSI,* p. 188.

Autobiographies

The autobiography is another non-fiction genre in which medico-legists sought to shape their legacies and convey their views of forensic medicine to readers. There are varied reasons behind individual pathologists' decisions to write autobiographies. Many well-known British and New Zealand pathologists wrote autobiographies and divulged details about their careers and their cases, but it appears no prominent Canadian pathologist did the same during the mid-twentieth century. Adam suggests that some British forensic scientists did not write autobiographies for several reasons. It might be that they did not have the time due to their enjoyment of and involvement in professional activities in their later lives. It could be that the writing and publication of an autobiography was not financially attractive enough for the author to justify spending time away from more profitable endeavours. Some scientists could simply have made a conscious choice not to write an autobiography.[99] Although Adam has not extended her analysis to cover Canadian medico-legists, all the reasons she has provided above are equally applicable to the Canadian pathologists. McGill, for example, continued to serve as a consultant to the Royal Canadian Mounted Police up to her death in 1959, and she had a private specialist practice in allergies and skin diseases after retirement.[100] Derome never retired from his job and passed away from cancer in 1931, only a few days after he was admitted to the hospital.[101] Neither doctor seemed to have the time to produce a full-length book detailing their eventful careers.

On the other hand, those medico-legists that managed to publish autobiographies used them to assert themselves as indisputable authorities, publicise their opinions and enhance their roles in particular cases. They emphasised the experiments or investigations the authors themselves had undertaken, and projected their own conclusions as reliable and indisputable. This is seen in Smith's account of the Sidney Fox case (England, 1929), where Fox was accused of strangling his elderly mother Rosaline and committing arson to cover up the crime. In this case, Spilsbury was a Crown witness and Smith was one of the defence experts. Smith disputed Spilsbury's post-mortem report on Mrs Fox by noting that there was no sign of external injuries associated with manual strangulation. Smith also thought it curious that there were no internal signs usually seen in asphyxiation other than a bruise on the larynx, upon which Spilsbury based his diagnosis of the cause

[99] Adam, *A History,* pp. 175, 176.
[100] 'Dr. Frances Gertrude McGill', Library and Archives Canada, accessed August 15, 2019, https://www.collectionscanada.gc.ca/women/030001-1417-e.html.
[101] 'Obituary', *Bench and Bar: The National Legal Newspaper*, December 1, 1931, 8.

of death. In a dramatic scene, Smith described what happened when he examined Mrs Fox's larynx: 'I looked – not at, but for, the bruise. *There was none to be seen.*' However, Spilsbury continued to insist during the trial that Mrs Fox was strangled to death. Smith described his own cross-examination and parts of other experts' evidence to show how they threw doubt on Spilsbury's contention that Mrs Fox died of strangulation. In emphasising his own evidence after recounting Spilsbury's testimony at length, Smith posited himself as a worthy opponent to Spilsbury's arguments. While Fox was found guilty, Smith believed the jury would not have returned the same verdict if the prosecution medical evidence 'had been given by anyone else but Spilsbury.'[102] By countering the main points of the prosecution case and criticising Spilsbury for his refusal to concede that he was fallible, Smith skilfully brought the reader to his point of view that Fox was innocent of committing matricide. Even though no further official inquiry was held about the case, Fox's conviction has been regarded by Spilsbury's biographer, Andrew Rose, to be unsafe.[103]

Similarly, Lynch's autobiographical account of the Bayly case demonstrated the difference between a professional scientist and an amateur. He described his involvement in the investigation in detail, from the recovery of bone fragments and reassembly of the bones, to his own experiment of burning an animal carcass in an oil drum. Lynch recalled the moment the defence lawyer attempted to undermine Lynch's interpretation of the 'bubbly' material that was on the surface of the bones during cross-examination. Lynch believed this material was the flesh that was attached to the bone when it was burnt. The lawyer applied some molasses to a different human skull and burned it in the courtroom, claiming that this would produce the same appearance as the bones Lynch saw. Although the bone was charred, Lynch pointed out 'there is no bubbly material'.[104] This failed experiment reinforced the need for a specialist to interpret scientific evidence, and added to Lynch's credibility as a pathologist. Although Smith was writing from the perspective of a defence expert for the Fox case and Lynch was describing the Bayly trial as a prosecution witness, the pathologists rendered their evidence in a way intended to indicate that their own conclusions were both scientifically sound and just. By showing their evidence in a favourable light, the pathologists demonstrated the vital role forensic medicine played in detecting and solving crimes. As Adam points out, fostering the idea that science is both objective and pivotal in criminal court cases helped create a positive image for medico-legists.[105] The examination of a New Zealand pathologist in the

[102] Smith, *Mostly Murder*, pp. 154-165.
[103] Andrew Rose, *Lethal Witness: Sir Bernard Spilsbury, Honorary Pathologist* (Kent, OH: The Kent State University Press, 2007), p. 183.
[104] Lynch, *No Remedy,* pp. 33-35, 38-39.
[105] Adam, *A History,* p. 171.

context of a local case demonstrates that Adam's observation is also applicable to other Commonwealth jurisdictions.

While the medico-legists discussed some of the themes and issues that were common to forensic medicine in newspaper serials, autobiographies expanded on those ideas. As autobiographies are not subject to the same restrictions as newspapers on space and word count, the authors could advance their beliefs and aspirations in more depth. The difference between the portrayals in newspapers and autobiographies could also be explained by the styles of different ghost writers and editors in each medium. This is evident in *Mostly Murder*, where Smith painted a more balanced and nuanced picture of the Merrett case compared to his newspaper account of the same case. In 1927, John Donald Merrett was charged with the murder of his mother.[106] Through his writings, Smith warned the public to be careful not to over-rely on police or experts' evidence in court, because they are fallible human beings and their mistakes could cause miscarriages of justice. This message was simplified in the newspaper serial which cast Spilsbury and Robert Churchill, a gunsmith who worked with Spilsbury, as the villains of the story. For example, Smith said Spilsbury 'made grave mistakes' and Churchill 'was held in dangerously high esteem by judges and juries. In fact, he was very far from being the leading expert he has often been painted.'[107] The over-simplification could be explained by the fact that Smith and the editors had to tell the entire Merrett story in a limited space. Smith's tone softened considerably in the autobiography when he said Spilsbury was 'very brilliant and very famous, but fallible like the rest of us', and 'Robert Churchill was famous too, and I am sure he was an excellent gunsmith.'[108] These statements seem to convey that Spilsbury and Churchill were misguided rather than incompetent when they devised a faulty experiment which allowed them to make 'ridiculous' claims.[109] In doing so, Smith implored potential jurors to judge carefully whether expert evidence could be trusted or not. These retrospective reflections on the Merrett case set the story as a cautionary tale rather than a demonstration of an ongoing problem. Glaister Jr. also discussed the Merrett case by linking it to the bigger discussion of the 'key of interchange' in his autobiography.[110] This is also known as Edmond Locard's exchange principle, the theory that when individuals enter a crime scene, they are bound to leave some trace of themselves behind and bring some part of the crime scene with them.[111] Glaister Jr. also discussed the powder-blackening and

[106] Smith, *Mostly Murder*, pp. 142-143.
[107] Sydney Smith, 'Today I Accuse the Police and Sir Bernard Spilsbury of Bungling', *People*, February 22, 1959, GB 0248 DC 403/2/6/6, JGP/UG.
[108] Smith, *Mostly Murder*, p. 144.
[109] Smith, 'Today I Accuse'.
[110] Glaister Jr., *Final Diagnosis*, p. 139.
[111] Jay A. Siegel and Pekka J. Saukko, eds., *Encyclopedia of Forensic Sciences*, 2nd ed. (London: Elsevier Science and Technology, 2012), p. 280,

tattooing around the bullet wound and their implications, but this interest in trace evidence is emphasised when he noted that after Merrett committed further murders and killed himself, some forensic scientists found pink wool fibres under his fingernails which were consistent with those from the clothing of one of his victims.[112] This helped preface Glaister Jr.'s later discussions about his interest in the 'key of interchange', which he used to justify his belief in the powers of science to arrive at the truth and to ensure justice is served.

Compared to journal articles and medico-legal case studies, autobiographies are even more accessible to the public. They aim to be relatable to an average reader, and inspire admiration for or interest in their work. Different authors have had varying degrees of success in accomplishing these goals. While Duvall has critiqued Smith's *Mostly Murder* in detail, Lynch's *No Remedy for Death* has not been given the same treatment in other academic work. Although Smith flatly stated that '[the] medico-legal expert… is not a detective', he qualified this statement by accepting that there are times when a medico-legist's 'peculiar experience and talents may enable him alone to deduce the correct interpretation of the facts' that the police could not see. He clearly drew parallels between his work as a medico-legal expert and the anecdotes about Dr Joseph Bell: the inspiration for Arthur Conan Doyle's Sherlock Holmes. Smith began the first chapter of his book with a story of how he was able to describe the victim and cause of death from three small bones. Smith built on the image of the hands-on scientist from the newspaper serials by highlighting the major qualities of Bell and Sherlock Holmes – keen observation, deductive reasoning and a wide breadth of knowledge – as the same qualities required for medico-legists to interpret the body and the crime scene accurately.[113] Smith used the comparisons with Sherlock Holmes to seek and, arguably, gain popular respect for the work of the medico-legist. On the other hand, Lynch characterised the pathologist's role as akin to a public servant in his autobiography. Lynch stated the pathologist's work in the investigation of death 'is bound up with matters of the greatest public interest and importance.' The different definitions of the medico-legal expert's role reflect individual pathologist's approaches in shaping forensic medicine in a way that appeals to the average reader. Lynch's explanations about the wider scope of forensic medicine are similar to the newspaper accounts of medico-legists commenting on social issues. It is possible that Lynch did not draw the connection between his work and Sherlock Holmes because his primary audience, the New Zealand public, would not resonate with the character in the same way. Even though Lynch focussed on major crime investigations he took part

https://ebookcentral.proquest.com/lib/canterbury/reader.action?docID=1125295&query=history%252Bof%252Bforensic%252Bsciences.

[112] Glaister Jr., *Final Diagnosis,* p. 49.

[113] Smith, *Mostly Murder*, p. 15, 28, 35.

in during the course of his career in his autobiography, he made it clear that his work as a pathologist had other implications for the public. He stated in the beginning of his book that '[the] pathologist is first of all a physician.' Therefore, Lynch set the expectation from the start that the pathologist's work is not limited to investigations of murders only, but that they have more day-to-day duties in the 'alleviation of disease' which 'gives the pathologist the greatest satisfaction in his work.' [114] Lynch's assertion of the role of the pathologist as primarily that of a humble physician and a public servant aligned his speciality with the well-established medical profession. In doing so, he aimed to elicit the same trust and respect the ordinary New Zealand readers usually place in doctors.

Medico-legists and their fictional work

British pathologists' and doctors' crime novels written during the mid-twentieth century portrayed the scientific aspects of crime investigations more realistically than ordinary novelists. During the twentieth century, more British scientists wrote and published fiction than those from Canada or New Zealand. Not all scientists have creative writing skills or the inclination to write fiction, and not all of them managed to have their creative efforts published. For instance, Glaister Jr. attempted to write fiction but all the publishers he approached rejected his drafts.[115] Some of the reasons for scientists not to write autobiographies could also be applicable here. While Lynch and Derome were prolific writers, they never published any fictional work based on the cases they were involved in. Although the scientists might have been motivated to write fiction by pecuniary incentives, this is only primarily applicable to the medico-legists who were more successful in having their fictional work published. Even then, Knight views his writing as a 'hobby', which implies he writes for his own pleasure rather than its financial rewards.[116] Doyle, the creator of Sherlock Holmes, was perhaps the most famous British medical man to produce popular fiction. However, Doyle did not portray scientific experiments or discuss scientific ideas in detail.[117] In contrast, Freeman, Knight and Glaister Jr. tried to portray science as realistically as possible. Freeman managed to show the progress of forensic science and medicine through his novels. The Thorndyke novel *Mr Polton Explains,* which is about using dental identification, was published five years after the Ruxton case,[118] where dentists

[114] Lynch, *No Remedy,* p. 14.
[115] See William Morrow to John Glaister Jr., December 28, 1949; and Lionel Crane to John Glaister Jr., August 9, 1962, GB 0248 DC 403/2/5/5, JGP/UG.
[116] 'A Case of Double Identity'.
[117] Adam, *A History*, pp. 192-193.
[118] R. Austin Freeman, *Mr Polton Explains* (London, 1940; Project Gutenberg Australia, 2014), chap. 17, http://gutenberg.net.au/ebooks05/0500371h.html.

were involved in the identification of the victims.[119] Knight said in an interview that he started writing crime fiction because he had 'the vague notion of correcting some misconceptions induced on readers of such fiction.'[120] Publishers recognised that Knight's professional training set him apart. Knight received an offer from a publisher soon after he publicly stated that he was completing a crime novel.[121] Similar interest was expressed by some of Glaister Jr.'s correspondents, including Erle Stanley Gardner, a famous writer and the creator of the Perry Mason detective series. Gardner stated that a novel produced by Glaister Jr. would be of special interest due to the latter's standing as a professor of forensic medicine.[122] Both Knight and Glaister Jr. bore out this common perception that professional pathologists were more likely to produce realistic fictional accounts of forensic medicine. In Knight's *Tiger at Bay*, the fictional pathologist concluded that the charred bone fragments were recently burned because of their un-weathered appearance.[123] This description is consistent with the evidence of charred bones in the Bayly case, though there is no indication that *Tiger at Bay* was influenced by the New Zealand case. In Glaister Jr.'s draft *Think of a Number,* he described the pathologist's diagnosis of the victim's cause of death and how he reconstructed the crime based on the victim's injuries.[124] The pathologist's work described here is similar to that undertaken by Knight's fictional Russian pathologist in *Russian Roulette*,[125] and the consistency of the descriptions suggests that they are based on actual practice.

Detective fiction by scientists popularised the belief that science was essential ammunition in the war on crime by associating it with the dialogues the public was already familiar with. Adam argues that it is too simplistic to consider the relationship between real and fictional forensic sciences as only a two-way influence upon each other. Fiction not only reflects the state of forensic medicine and encourages change, it also contextualises the relatively new confidence in the powers of science within the longstanding concerns about sustaining moral and social mores, which was arguably a universal preoccupation within the British Empire. The scientists' crime fiction incorporates the scientific process within the traditional narrative of order being disturbed by a crime committed but restored by the capture of the culprit and the delivery of justice. Adam points out that Thorndyke fits into the role of the morally superior hero who was always in control of himself and the case he was investigating. By setting Thorndyke up as the hero who used his considerable scientific skills to

---

[119] See witness statement of Samuel Fawcett, a dental surgeon, October 12, 1935, GB 0248 GUA FM/2A/25/8, RDFMS/UG.
[120] 'The Doctor Deals in Murder'.
[121] J. Derek Grimsdick to Bernard Knight, January 18, 1962, GB 1239 454/5/4/1, BKP/UC.
[122] Erle Stanley Gardner to Thayer Hobson, August 8, 1949, GB 0248 DC 403/2/5/5, JGP/UG.
[123] Bernard Knight, rough draft of *Tiger at Bay,* 1969, pp. 61-64, GB 1239 454/1/3/1, BKP/UC.
[124] John Glaister Jr., typescript entitled 'Think of a Number', 1950s-1960s, GB 0248 DC 403/2/5/1, JGP/UG.
[125] Bernard Knight, draft of *Russian Roulette,* 1967, pp. 93-95, GB 1239 454/1/1/1, BKP/UC.

restore the order disturbed by villains, Freeman used a character to embody the powers of science as a force of good.[126] While Adam has drawn from fictional work written by various scientists and medical men in her study of forensic fiction, she has not considered Knight's crime novels set in the 1960s or Glaister Jr.'s unpublished fiction drafts. Knight took a different approach from Freeman in his modern novels as he attempted to portray science as an integral part of the process to achieve justice. In Knight's crime novels that are set in the mid-twentieth century, science played a part in pinning the crime on the true villain. In *Russian Roulette,* even though the novel is not set in Britain, the universality of the expert pathologist's knowledge is evident when the Russian pathologist identified two separate groups of injuries on the victim, pointing to two different assailants. They also noted in the end that an incriminating object had the true culprit's fingerprint on it, so '[they'd] have got him eventually.'[127] Knight's work demonstrates that the same preoccupation with the use of science to achieve justice is seen beyond the time period Adam has considered in her work. Therefore, as the authors elaborated on the scientific aspects of crime detection in their novels, these descriptions of how crime could be solved using science became seamlessly incorporated into the wider themes that the readers could appreciate collectively.

The fictional works by scientists based on successful forensic investigations reinforced the view that science was fundamental to the eradication of crime by adding authenticity to the stories. Fiction based on true crime not only repeated some of the details and techniques already familiar to some readers, the creative medium also allowed the authors to explore other ways to solve the crime and arrive at their preferred solutions. The influence of Knight's experience as a pathologist working in the mid-to-late-twentieth century is most evident in his novel *The Thread of Evidence.* He admits openly that the facts of the novel's main mystery are based on the murder of Mamie Stewart,[128] but he has been careful not to base novels too closely on other cases so he would not risk defaming someone.[129] In both real life and fiction, a skeleton belonging to a young woman was found in a cave, and the main issue facing the investigators was to establish the skeleton's identity. The novel also borrowed aspects of the Ruxton case, which is seen in the sequence where the fictional investigators found blood in the drains and surmised that there was an attempt to dismember the body in the bathtub.[130] The novel included scientific techniques which were not used in the Ruxton case to assist in identification, such as the comparison of the skull X-rays.[131] Similarly, Glaister Jr.'s

[126] Adam, *A History,* pp. 185, 190-191.
[127] Knight, *Russian Roulette* draft*,* pp. 158-159.
[128] 'The Doctor Deals in Murder'.
[129] 'The Perfect Crime Writer: Pathologist, Barrister and Editor', 1971-1975, GB 1239 454/1/1/1, BKP/UC.
[130] Bernard Knight, *The Thread of Evidence* (Abercynon: Accent Press, 2015), chap. 16, iBooks.
[131] Knight, *The Thread of Evidence*, chaps. 11-13.

draft screenplay outline *Members of the Jury* is based on the Merrett case. Both cases were about the issue of whether the shooting of a woman was an accident, suicide, or murder. Although the judicial outcomes were the same, Glaister Jr.'s story arrived at a different conclusion that there was truly no murder.[132] The discretion provided by the fictional genre allowed the writers to further their own agenda or beliefs regarding the state of forensic medicine. *The Thread of Evidence* could be read as a reminder of the value of thorough scientific investigation, which was essential in setting the police on the right track to find the murderer. As science reveals the truth in the end of each fictional work, it shows the reader that using science to solve crimes is both essential and achievable in real life.

In their fictional writings, the scientist-authors were interested in creating a situation where they could show forensic medicine at work to its best advantage. This tension is seen in Glaister Jr.'s draft novel *Broke the Fair Music*,[133] where he obviously wished to showcase a case of arsenical poisoning by fumes, but he had to contend with considerations like how best to sustain the interest of the readers. The proof reader opined that it was too easy to guess who the murderer was, and pointed out the weakness in the plot's construction.[134] Nevertheless, Glaister Jr. demonstrated how the crime was committed and clarified that it was scientifically possible. This is similar to Freeman's Thorndyke novels. Freeman was not only noted for ensuring that the scientific details in his novels were accurate, the scientific experiments drove the plots of his stories. Freeman also favoured realistic scientific analysis, sometimes at the detriment of the pace of the story. He employed inverted story-telling where the suspense was about how the crime was accomplished.[135] For example, in *The Red Thumb Mark*, the true culprit was unmasked because Thorndyke was able to discover how he forged a fingerprint.[136] Freeman had verified all the experiments carried out by Thorndyke, which added realism to the character and the stories.[137] The attention paid to the scientific details encourages the readers to consider forensic medicine and science seriously. These writings also serve to further the author's favoured causes in regards to forensic medicine. *Members of the Jury* could be read as a study of the ideal characteristics of a good expert witness, as Glaister Jr. contrasted the expert based on Spilsbury unfavourably against other more objective medical witnesses.[138] There were concerns among the medico-legists that forensic science was not being

[132] John Glaister Jr., typescript entitled 'Members of the Jury', 1950s-1960s, GB 0248 DC 403/2/5/2, JGP/UG.
[133] John Glaister Jr., typescript entitled 'Broke the Fair Music', 1950s-1960s, GB 0248 DC 403/2/5/4, JGP/UG.
[134] Lionel Crane to John Glaister Jr., August 9, 1962, GB 0248 DC 403/2/5/5, JGP/UG.
[135] Adam, *A History,* pp. 194-195.
[136] R. Austin Freeman, *The Red Thumbmark* (London, 1907; Project Gutenberg Australia, 2014), http://gutenberg.net.au/ebooks/c00002.html.
[137] Adams, *A History*, p. 194.
[138] Glaister Jr., 'Members of the Jury'.

prioritised, so the involvement of prominent experts in the crime fiction genre could be seen as an attempt to elicit popular awareness and support. A journalist picked up on Knight's description of Newcastle's 'archaic' mortuary in *Policeman's Progress* and commented that this novel would be provided to the Lord Mayor for the City Council to 'do something about its "Dickensian" mortuary.'[139] Interestingly, in Knight's novel, the fictional pathologist was not hampered by the poor conditions of the mortuary, and provided important information for the police to arrest the criminal. It demonstrated the medico-legist's ability to work in challenging conditions and still obtain good results.

The fictional work popularised the positive view of forensic medicine to a wider audience. Although not many medico-legists wrote fiction, novels by Knight and Freeman have been disseminated around the world. The medico-legists also took advantage of other forms of media to cement the belief that forensic medicine was necessary to the successful outcome of crime investigations. Neither Glaister Jr. nor Knight limited their fiction writing to novels. Glaister Jr.'s typescript *Members of the Jury* contains descriptions of television camerawork, and Knight adapted his novels, such as *The Thread of Evidence,* into radio plays*.* While the last Thorndyke novel was published in 1942, the character and storylines were later adapted into a television series at the BBC in 1964.[140] The popularity of *Thorndyke* and crime fiction is also evident in the creation of shows such as *The Expert* (1968-1976), which followed the career of a Home Office pathologist, Professor John Hardy.[141] Both Glaister Jr. and Knight were involved in the production of the series.[142] Television is able to broadcast the narrative of science triumphing over criminals effectively by engaging the sight and hearing of the viewers through images and sound. The competitive market of crime television series and the introduction of *Thorndyke* was remarked upon by a *Times* reviewer: 'There is, of course, a considerable public addiction to whodunits, but it is not so widespread as to justify the amount of television time devoted to it…'[143] However, the reviewer did not provide any research or statistics to back up the statement. It is also unlikely that forensic medicine television shows would have been produced if there was little or no public interest in forensic medicine.

---

[139] Peter Hinchliffe, 'Clue to Thriller Lies in the Mortuary', *Evening Chronicle,* March 13, 1969, GB 1239 454/6/26/1, BKP/UC.
[140] Adam, *A History,* p. 204.
[141] David A. Kirby, 'Forensic Fictions: Science, Television Production, and Modern Storytelling', *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences* 44, no. 1 (2013): 94, https://doi.org/10.1016/j.shpsc.2012.09.007.
[142] See John Glaister Jr., Correspondence Regarding The Expert Series with Scriptwriters for the BBC, 1966-1969, GB 0248 DC 403/2/7/2, JGP/UG; Derek Hooper, 'Dr. Knight- The Expert in So Many Fields', 1971-1975, GB 1239 454/6/26/2, BKP/UC.
[143] 'Television's Endless Belt of Trivialities', *Times*, November 7, 1964, 5.

As the interactions between fictional and real forensic medicine played out on television, the positive view of forensic medicine was projected to people who might not necessarily have read about the subject. However, as with newspapers, scientific experts do not have ultimate control over the final portrayal of forensic medicine in radio plays and television shows. David Kirby points out even when early-twenty-first-century forensic science shows employed scientific consultants to ensure accuracy of the show's scientific content, the television writers and the forensic scientists have different perspectives on the accuracy of the forensic science that was broadcasted. He argues that the television writers are more interested in whether something is scientifically feasible, whereas the scientists are more concerned about whether that something is likely to happen at all.[144] There is no suggestion that the same could not be applicable to fictional shows about forensic medicine earlier in the twentieth century. In fact, this tension played out on the screen in *The Expert* episode 'Blood Line'. There was a scene where Hardy and another character argued whether it was possible the victim was murdered. Hardy speculated that the victim could have been murdered by an unusual combination of drugs but initially rejected this as very unlikely. The other character was convinced that if it was theoretically feasible then it needed to be investigated. It later transpired that Hardy's improbable theory was correct.[145] This supports Kirby's argument that even though it was scientifically unlikely, the television writer's 'flexible realism' allowed the murder to take place as described in Hardy's theory.[146]

Despite reservations about the realism of forensic medicine on screen, medico-legists still attempted to shape the role of forensic medicine in a memorable and favourable way to consumers of a different media format. Even though Glaister Jr.'s fictional work was never published, he utilised the television to teach the public about forensic medicine by hosting a documentary about its development. He was clearly meticulous about fact-checking the script when he gave the assessment that the documentary 'spared no pains to ensure accuracy.' They even transported Glaister Jr.'s own senior technician and laboratory equipment from the University of London for the show.[147] Important ideas about medico-legists and forensic medicine have been portrayed in television storytelling. While forensic medicine and forensic science did not feature prominently in television crime shows until the 1990s, an exception to this in Britain was *The Expert.* Throughout his

[144] Kirby, 'Forensic Fictions', 96.
[145] David Sullivan Proudfoot (dir.), *The Expert,* season 4, episode 2, 'Blood Line', aired October 1, 1976. https://www.youtube.com/watch?v=ic-f6P735QE.
[146] Kirby, 'Forensic Fictions', 97.
[147] Glaister Jr., *Final Diagnosis,* p. 202.

written work, Knight emphasises both that it is important for pathologists to be impartial and that their conclusions are 'necessary to arrive at a just verdict'.[148] Knight's ideal came alive on the screen around the time he acted as a medical and scientific consultant for *The Expert*.[149] This is seen when Professor Hardy proclaimed in the beginning of 'Blood Line' that he would perform the autopsy with 'complete impartiality'.[150] Hardy also arrived at the unshakable truth that the victim was murdered because laboratory tests showed a lethal combination of drugs in the victim's blood. The show clearly foreshadowed the idea that humans could be fallible but physical evidence does not lie, which is a concept now common to most of the current crime shows centred on forensic science.[151]

Conclusion

This chapter examined the various forms of media which were produced during the mid-twentieth century about forensic medicine by medico-legists who worked in Britain, New Zealand and Canada. Medico-legists were well-enough placed within the British Empire's various justice systems for general newspaper reporting of crime to feature their investigations prominently. Although pathologists did not have full control over how forensic medicine was portrayed in the newspapers, they attempted to shape their own media persona and tried to direct how the profession as a whole was perceived by recounting how forensic medicine had exposed the truth. They had greater control over their own non-fictional writings produced under their names, as they were able to emphasise the value forensic medicine brought to crime investigations in journal articles and textbooks. The professional writings also discussed forensic medicine in the wider scientific context, which increased its relevancy and credibility among more established medical fields. Although not all medico-legists chose to write autobiographies or fiction, the autobiographies and fiction that were produced further reinforced the popular image of forensic medicine as a necessary element of the crime-fighting arsenal among a wider audience. Some of the major figures mentioned in this chapter, such as Camps, Simpson and Lynch, will reappear in Chapter Two in the context of their attempts to address potential scandals in forensic medicine and maintain the image of forensic medicine as the arbiter of truth.

[148] Knight, *Murder, Suicide or Accident* draft, p. 21.
[149] Hooper, 'Dr. Knight'.
[150] Proudfoot, 'Blood Line'.
[151] Kirby, 'Forensic Fiction', 97.

Chapter Two: Medico-legists and scandals in forensic medicine

Although medico-legists faced challenges when scandals in forensic medicine were exposed during the mid-twentieth century, they managed to portray forensic medicine in ways that minimised the impact of controversies. This chapter considers the Evans, Truscott and Mareo cases, all of which have been cited as examples of miscarriages of justice. While all three cases have been the subject of extensive research, analysis and speculation, this chapter compares the weaknesses of the scientific evidence in all three cases for the first time to demonstrate how medico-legists within the British Commonwealth managed potential scandals. Medico-legists tended to present a united front to portray forensic medicine in a positive manner in the mid-twentieth century. Simpson and Camps also attempted to protect their colleagues who made mistakes. Although Simpson and Camps eventually became professional rivals later in their careers, they were united in their common goal to present forensic medicine positively. Clashes between pathologists' evidence in court became normalised as Britain, Canada and New Zealand have adversarial justice systems, and because science often involved grey areas which enabled experts to provide different interpretations of the same phenomena. The controversies within forensic medicine were further side-lined by social activists who decided to utilise the same cases for their own causes, which distracted the public's attention from problems inherent in forensic medicine. These factors mean forensic medicine's successful reputation in assisting the process of justice remained largely untarnished. The discussions about how pathologists dealt with scandals build on Chapter One's analysis of the way pathologists presented forensic medicine, and address a gap in existing secondary literature on the topic. The evaluation of medico-legists' efforts in maintaining a positive image also provide context for Chapter Three's examination of Cole's claim that scandals provided impetus to reforms in forensic medicine.

Forensic medicine and medico-legists: Evans, Truscott and Mareo cases

Evans

In all cases where there were controversies or potential scandals in forensic medicine, the medico-legists tended to form a united front in presenting the field positively, and to protect the medico-legist who caused the controversy. This is evident in the Evans case, where original research into governmental papers about the official inquiries show that Camps defended his fellow pathologist Donald Teare's less impressive post-mortem examination with Camps' own extensive scientific

investigations of the Christie case. As described above in Chapter One, the disagreement in interpretations of scientific evidence in the Evans case was primarily about whether there were any indications Christie had murdered Beryl Evans and Geraldine. The controversy about forensic medicine was brought to the public arena when Kennedy argued that Christie killed Mrs Evans because the original pathologist, Teare, found a post-mortem bruise inside Mrs Evans' vagina, which meant the bruise was caused after death.[1] Furthermore, Teare speculated this could have been caused by forceful sexual intercourse, yet he did not take a vaginal swab to confirm whether sexual assault took place.[2] Camps, who was Teare's contemporary, did not act in the same way. Simpson recalled that he, Camps and Teare were often referred to as 'the Three Musketeers' by the police because they were similar in age and started in medico-legal practice at around the same time. They were friends in the beginning of their careers as all three pathologists were based in London.[3] Camps demonstrated an expectation for vaginal swabs to be taken routinely. In a summary of Camps' evidence during the Christie trial in 1953, he stated 'it should be a routine matter in all cases of suspected violent death to make a vaginal test. I always do, and I suppose Dr Teare, for example, does.'[4] Camps demonstrated this in practice when he examined Christie's victims in 1953. He said he saw 'nothing obvious in the vagina' of one of the women, Kathleen Maloney, but his swab test proved there was semen.[5] However, there was a variation of practices between different practitioners. Knight, another Home Office pathologist, suggested that 'in cases with sexual background secretions from the orifices may be needed' for the forensic laboratory.[6] This seems to qualify Camps' view that vaginal tests should be taken in all suspected violent deaths.

Nevertheless, it seems reasonable to expect Teare to take a swab from Mrs Evans in light of Camps' and Knight's standards. She was strangled, and there were signs of sexual assault when her body was found because her clothing 'were so disarranged that the breasts, upper abdomen, thighs and private parts were exposed.'[7] Teare's initial explanation for his failure to take a swab test seems weak. A governmental inquiry was held in 1953, where John Scott Henderson, a lawyer, presided over private interviews with all important witnesses involved in the Evans matter to determine whether Evans was guilty of murder. As prosecution witnesses during the Evans-Christie trials, Camps, Teare, and Lewis Nickolls, the director of the Metropolitan Police Laboratory, participated in

[1] Ludovic Kennedy, *Ten Rillington Place* (London: Victor Gollancz, 1961), p. 137.
[2] Donald Teare to Ludovic Kennedy, December 11, 1959, CAB 143/2, NA.
[3] Simpson, *Forty Years*, p. 32.
[4] Statement of Francis Camps, 1953, p. 29, CAB 143/16, NA.
[5] Ibid., p. 27.
[6] Knight, *Murder, Suicide or Accident* draft, p. 62.
[7] Statement of Donald Teare, December 5, 1949, p. 218, CAB 143/16, NA.

the inquiry. Teare recalled he examined the vagina with a hand lens and found no material there which required further investigation.[8] In a letter dated from 1959, Teare stated again that he could see nothing 'visible in the vagina to indicate the necessity for taking a swab' but that 'while [he] suggested at the time, others thought it was unnecessary.'[9] Copies of letters exchanged between Teare and Kennedy about the vaginal bruise and swab prior to the publication of Kennedy's book were disclosed to the treasury solicitor when the scientists applied for legal representation in the new inquiry by Justice Daniel Brabin into the Evans matter in 1965. This indicates that even though Teare's explanation was officially accepted in the Scott Henderson inquiry, the lawyers might have been concerned about the questions raised in relation to Teare's work. Teare later clarified in the second inquiry that he discussed the matter with police officers and they thought it was not required,[10] which seems surprising because Teare was the pathologist in charge and should have had the authority to determine what specimens to take. Other reasons have been suggested about the omission of a vaginal swab. Notes from a Home Office meeting in 1953 about Christie's confession to the murder of Mrs Evans records the suggestion that no vaginal swab was taken initially from Mrs Evans because 'Mrs Evans was a married woman living with her husband'.[11]

During the Brabin inquiry into the case, Teare agreed under cross-examination that taking a vaginal swab was 'very frequently' a routine matter, but that 'at that time we did not realise it was valuable to take swabs.' He believed that if sexual intercourse took place before death, then he would still discover signs of semen in the vagina after three weeks, since Camps found semen in weeks-old bodies of Christie's victims. However, he continued to insist that he did not detect anything in Mrs Evans' vagina, but conceded that if they had known it was important to determine whether Mrs Evans had sexual intercourse around the time of death then he would have taken a swab anyway.[12] Teare's post-mortem report on Mrs Evans also did not contain the amount of detail present in Camps' work.[13] Burney and Pemberton argue that in the Brabin inquiry, Teare's role in the case suffered because his work was 'primitive' compared to that of Camps and Nickolls. Teare's investigation was seemingly limited to the mortuary and he took little interest in modern ideas of crime scene investigation.[14] For example, Teare did not preserve or take note of how exactly the

[8] Scott Henderson Inquiry 1953: Transcript, 1953, p. 18, CAB 143/7, NA.
[9] Teare to Kennedy, December 11, 1959.
[10] Day 6, November 29, 1965, p. 487, CAB 143/36, NA.
[11] 'Notes on Christie's Confession to the Murder of Mrs Evans', 1953, Document A9, CAB 143/9, NA.
[12] Day 6, pp. 468, 486.
[13] Compare Francis Camps, 'Report on Exhumation of the Body of Beryl Evans and Geraldine', 1953, CAB 143/18, NA; and Donald Teare, 'Post-mortem Examination of Beryl Evans', December 12, 1949, CAB 143/16, NA.
[14] Burney and Pemberton*, English CSI*, p. 193.

knot around Geraldine's neck was tied.[15] He could not remember how long ago the bruises on Mrs Evans' face were caused before death, and he did not record this at the time in his notes.[16] Therefore Teare's post-mortem examination in 1949 was of an inferior quality compared to that of Camps' work in 1953.

However, Teare's post-mortem examination and his conclusions were defended by Camps and Nickolls during the Brabin inquiry. The scientists' tones were not critical towards Teare at all. Camps agreed that at the time Teare conducted the original autopsy of Mrs Evans in 1949, the recognised teaching was that the sperm would not survive in a body after 48 hours so 'it wasn't worth looking for it'. Contrary to his experience with Kathleen Maloney's body, Camps stated in the inquiry that he was 'sure [semen] would have been seen' if there had been any present in Mrs Evans' vagina. He supported his colleague's naked-eye examination and agreed that Teare's decision-making at the time had been sound. Nickolls also explained for the first time in the Brabin inquiry that it was not routine for swabs to be taken from female sexual assault victims in London until he became the head of the laboratory in 1951. He made the vaginal test mandatory because of his experiences with investigating assaults on females when he was working elsewhere. He said the Christie case was one of the first notable cases where this practice was used.[17] While Camps' and Nickolls' explanations excused Teare's decision not to take a swab, there are inconsistencies between the scientists' statements. Camps departed from his 1953 statement about vaginal swabs being a routine test which he always undertook. Nickolls attributed the practice of taking swabs as part of a routine he instituted in 1951, while Teare indicated that Camps' work in the Christie case in 1953 was instrumental in making this practice commonplace.[18] While these inconsistencies could be attributed to the effects of time, it is still possible that these scientists were attempting to recast their own narratives to justify Teare's outdated practices in 1949. Given that these pathologists worked on the same side of the case, and in light of Camps' friendship with Teare, it is arguable that Camps had professional and personal objectives in supporting Teare's obsolete methods and brushed aside potential mistakes. Camps and Nickolls also brought Teare's work under the aegis of more modern scientific investigations. Nickolls eliminated further need to discuss the omission to take swabs, since he made it clear this practice was now routine. Nickolls also reasoned there was nothing for him to swab from Mrs Evans' vagina in the exhumation because Teare would have cleaned the vagina when

[15] Day 6, p. 476.
[16] Scott Henderson Inquiry 1953: Transcript, p. 15.
[17] Day 7, 30 November 1965, pp. 517, 537, 552, CAB 143/37, NA.
[18] Day 6, p. 468.

he conducted his initial examination, so there was no purpose in pursing this matter further.[19] Both Camps and Nickolls concluded from their later investigations of Mrs Evans' body in 1953 that 'considerable confirmation of the original post mortem findings was possible.'[20] Even though Teare's work was brought into question, Camps and Nickolls' later investigations from Mrs Evans' exhumation gave legitimacy to Teare's findings. Camps' confirmation of the main findings from Teare's post-mortem examination of Mrs Evans were briefly reported in the *Times, Guardian* and *Daily Telegraph*, but none of the journalists examined Teare's work and Camps' agreement any further. Instead, the reporters were more interested in recounting the contents of a letter from a woman who claimed she managed to escape from Christie, which was mentioned during the course of Camps' evidence in the inquiry.[21]

There were also no challenges from other experts against Teare's findings in 1949, which means there was no public clashes between experts over Teare's failure to take the vaginal swab and his explanations for this omission. Teare was the only pathologist called during Evans' trial, so his evidence was not challenged by another expert at the time.[22] Simpson was the other pathologist who was consulted to advise the defence in the Christie case.[23] As Simpson recalled in his autobiography, his role was to investigate whether there was anything in the medical evidence surrounding Mrs Evans' and Geraldine's deaths which supported Christie's confession to Mrs Evans' murder.[24] Simpson ultimately concluded he could not provide useful evidence to the defence after conducting his own tests. He did not attend the Scott Henderson inquiry in person and he made no comments about the vaginal swab issue during the Brabin inquiry.[25] Although Simpson noted that he was careful 'not to give anything away' while he was working with Nickolls, Camps and Teare on behalf of Christie's defence, Simpson clearly held Nickolls and Teare in high regard. In *Forty Years of Murder,* Simpson described Teare as a 'solid, likeable man… competent both in the field and in the witness box'. He praised Teare's 'characteristic thoroughness' in his examination of the body. Simpson accepted Teare's explanation for the vaginal bruise and he did not criticise Teare at all for not taking a swab. Instead, Simpson defended Teare's oversight. He dismissed Kennedy's claim that Teare would have found Christie's sperm if he had taken a swab at the time as a 'reckless over-

[19] Day 7, p. 547.
[20] Camps, *Christie Case*, p. 145.
[21] 'Woman Told of Fight with Christie', *Daily Telegraph,* December 1, 1965, 24; 'Woman Said She Knew Christie Intended to Murder Her', *Times*, December 1, 1965, 6; 'Christie "Intended to Kill" Me', *Guardian*, December 1, 1965, 5.
[22] Tennyson Jesse, *Trials*, p. 15.
[23] Scott Henderson, 'Report of an Inquiry', p. 15.
[24] Simpson*, Forty Years,* pp. 237-238.
[25] Day 7, pp. 562-574.

statement'. He also informed Christie's solicitors that Teare's original autopsy report had not overlooked anything.[26] It appears even though Simpson was consulted by the defence, Simpson in fact went out of his way to endorse Teare's 1949 findings once it was clear his opinions aligned with that of the prosecution. It is arguable that Simpson, like Camps and Nickolls, formed a collegial front to protect their friend Teare. In doing so, they shielded the reputation of forensic medicine by denying that Teare made a mistake at all.

Truscott

The pathologists in the Truscott appeal in 1966 also presented a united front when faced with a possible scandal in forensic medicine in the form of Dr John Penistan's evidence against Truscott in 1959. Truscott was a 14-year-old boy who was convicted of the rape and murder of his classmate Lynne Harper in 1959.[27] During the trial, the prosecution pathologist, Penistan, insisted that the state of Lynne's stomach contents led him to estimate the time of death to be within two hours of Lynne's last meal. He refused to agree to a wider window than fifteen minutes either way.[28] This coincided with the time Truscott was seen with Lynne, and it became a major factor leading to his conviction. The publication of LeBourdais' book in 1966, which criticised Truscott's trial, and, in particular, the forensic evidence relied upon to convict him, led to a public outcry. LeBourdais contended that Penistan could not have accurately estimated time of death from the victim's stomach contents to a narrow timeframe.[29] As a result of public pressure, the Canadian government referred the matter to be heard again in the Supreme Court before nine judges in 1966.[30] Even though the newspaper articles did not discuss issues in forensic medicine in great scientific detail, Penistan faced public criticism over his interpretation of the autopsy's results and his performance in Truscott's trial.[31] Unbeknownst to the defence, Penistan provided two different time of death estimates in previous versions of his post-mortem report, which would have cleared Truscott of suspicion.[32] Penistan also gave an 'agonising reappraisal' of his own findings years later, where he showed more reserve about his estimate of Lynne's time of death. He conceded that the rigor and decomposition of the body and stomach contents were 'not incompatible' with a later time of death, which gave the continued

[26] Simpson, *Forty Years*, pp. 233, 238-239, 244.
[27] Odell, *Medical Detectives,* p. 167.
[28] Sher, *Until You Are Dead*, p. 62.
[29] LeBourdais, *Steven Truscott*, pp. 60-62, 68-71.
[30] 'Truscott Decision Likely by Monday', *Ottawa Citizen*, April 16, 1966, 19; 'The "Reference" to the Supreme Court', *Ottawa Journal,* April 28, 1966, 6.
[31] See for e.g. Ronald Grantham, 'A Question Mark Raised over Murder Conviction', review of *The Trial of Steven Truscott,* by Isabel LeBourdais, *Ottawa Citizen*, March 19, 1966, 30.
[32] Truscott (Re), [2007] ONCA 575, at paras [225]-[226]

assertion of his official findings a hollow ring.[33] In 2007, the Ontario Court of Appeal agreed that Penistan's estimate of time of death during the Truscott trial was influenced by the Crown's theory, implying that he changed his medical opinions for the prosecution's convenience.[34] Other scientists were also reportedly disturbed by Penistan's report. For example, Dr Noble Sharpe, a Canadian forensic scientist who gave evidence for the Crown, commented years later that 'medicine cannot be that precise and exact at the present time' when he discussed the science of determining the time of death. Even Simpson expressed some reservations about Penistan's autopsy conclusions to the Crown team at the time of the 1966 appeal when he said 'it would not be difficult for critics to point to many statements from various writers (including myself)… indicating the caution one must exercise in using stomach emptying time in estimating the approximate time of death.'[35]

However, Simpson and Helpern, an American expert, presented a united front for the prosecution and supported Penistan's findings at the 1966 appeal. Years later, Helpern defended Penistan's work by describing him as 'quite experienced' and stating that he 'did an excellent job'. Helpern was likely to have been professionally honest in his agreement with Penistan's approach of using stomach contents of the victim to determine the time of death, because he had discussed using the same technique in another famous case in the United States. It is arguable that Helpern supported Penistan out of professional collegiality when he saw Penistan was attacked in public for subscribing to the same theories he used. Helpern was sympathetic to Penistan. He admitted that he 'felt sorry for Dr Penistan, who had been given a really rough ride for a long time.' Helpern also characterised the criticisms negatively as 'almost abuse.' Helpern was biased against Truscott. His account of the Truscott case made several erroneous claims that could have swayed unwitting readers in the prosecution's favour. For example, he claimed Truscott had initially confessed to murder and later retracted his confession, which never happened. He clearly wanted to support Penistan publicly to try to counteract the criticism of the medical theory he agreed with when he stated he wished 'the backing that Keith Simpson and I gave [Penistan] in Ottawa helped to make up for some of the acrimony that he suffered during these intervening years.' While Helpern was not unkind about Camps in his memoirs, he described Simpson with considerably more warmth and argued that Simpson had the benefit of greater experience compared to Camps, which bolstered their own arguments.[36] Helpern used his experience, reputation, and other experts' support to bolster Penistan's original conclusions and to weaken Truscott's case.

---

[33] Ibid., paras [229]-[230].
[34] Ibid., para [232].
[35] Sher, *Until You Are Dead,* pp. 302, 386.
[36] Knight and Helpern, *Autopsy* draft, pp. 38-43, 79, 82-85.

Like Helpern, Simpson also publicly supported Penistan's official autopsy report. Despite his misgivings in private, Simpson called Penistan's conclusions 'surprisingly sound' in public.[37] His determination to support the prosecution's case was apparent when he praised the police investigation as 'thorough', and the crime scene as 'carefully preserved',[38] even though LeBourdais pointed out the searchers compromised the crime scene by draping jackets and shirts over Lynne's body, and no inspection was made for any hair or fibres that might have been transferred from the body onto the clothing.[39] He excused Penistan's loss of evidence by saying the mortuary was 'ill-lit' and it was 'perhaps, no surprise' it happened.[40] Simpson attempted to give Penistan some authority by emphasising that he was trained at the University of Oxford. In fact, Simpson had a more personal link to Penistan compared to Helpern, as he 'examined' Penistan in his finals in Oxford.[41] Therefore, it is arguable Simpson had more incentive to support his student and to ensure that his work was not discredited. He described Penistan's autopsy in the highest terms when he said 'Dr Penistan gave it the most patient, thorough and skilled attention which was most apparent from his long and detailed report'.[42] He repeated the same description in his autobiography years later, adding that '[he] did not remember, in thirty years, having seen a more thorough or painstaking report, or any more impartial deductions.'[43] It is unclear whether Simpson realised that this report was, in fact, written after the original Truscott trial had finished. Sher also attributed the Crown's new theory in the Supreme Court appeal to Simpson. To fit in with Penistan's estimate of time of death, Simpson argued that Lynne did not suffer from any fear and shock that could have slowed stomach movements to support a later time of death, and theorised that she died quickly. These interpretations were pure conjecture not supported by any other evidence.[44] By giving unconditional endorsement to Penistan's conclusions, Simpson gave the original autopsy conclusions plausibility and credibility even in the face of opposition from other prominent medical experts.

Simpson not only attacked the weaknesses of LeBourdais' book, he also attempted to undermine Camps' opposing medical theories in the long run by portraying him unfavourably in his autobiography. Although Simpson and Camps were friends, the Truscott appeal came at a point in

[37] Harold Morrison, 'Truscott Evidence "Sound"', *Windsor Star*, July 13, 1966, 25.
[38] Simpson, 'Steven Truscott', 63, 65.
[39] LeBourdais, *Steven Truscott*, p. 30.
[40] Simpson, 'Steven Truscott', 65.
[41] Simpson, *Forty Years*, p. 345.
[42] Simpson, 'Steven Truscott', 64.
[43] Simpson, *Forty Years*, p. 345.
[44] Sher, *Until You Are Dead,* pp. 295, 387.

their careers when they were widely known to be professional rivals.[45] Simpson stated this rivalry affected Camps' impartiality because he and Teare both noticed Camps was increasingly providing medical evidence on their opposing side, 'often on very filmsy grounds'. Simpson then recounted the 'disastrous' incident when Camps was exposed in the Supreme Court for making an unethical and unsolicited offer of services in the Truscott case, by writing to the Attorney-General of England and offering to give evidence in Truscott's favour.[46] In doing so, Simpson portrayed Camps as biased in his approach to the case, which diminished the weight of his evidence. However, it is arguable that, despite professional animosity, Simpson protected the reputation of forensic medicine at the time of the Truscott appeal by not discussing Camps' embarrassing incident in his journal article about the case, and refraining from making further public remarks directly about the incident. Simpson only discussed this incident in detail after Camps' death, and in an autobiography published more than a decade after the Truscott appeal. It is unlikely Simpson was concerned about libel because the facts of this incident had already been reported in both British and Canadian newspapers at the time.[47] While Simpson criticised Camps' actions, this was to offset Simpson's own legacy in the case by showing himself, his theories and involvement in the best possible light. To Simpson, no harm was done by Camps' actions because the outcome of the appeal was just. This incident also demonstrated to the readers the importance of impartiality among medico-legists. The approach Simpson took with the Truscott case is reminiscent of Smith's autobiographical account of the Merrett case as described in Chapter One. Therefore, while Simpson undermined Camps' evidence through this incident, Simpson was not portraying Camps' actions as an ongoing issue but as a warning to younger experts, thus preserving the reputation of forensic medicine in determining the truth.

Mareo

Although both the prosecution and defence experts in the Mareo case agreed that Mrs Mareo died from veronal poisoning, this was their only common ground. Mareo was accused of murdering his wife, Thelma, by overdosing her with veronal, which is a barbiturate that was commonly used as a sleeping aid.[48] He then underwent two trials because after he was found guilty at the first trial, a new trial was ordered in the same year when new evidence about Mrs Mareo's drug habits came to

[45] Robert Jackson, *Francis Camps* (London: Hart-Davis MacGibbon, 1975), p. 15; Simpson, *Forty Years,* p. 231.
[46] Simpson, *Forty Years*, pp. 231, 350-351.
[47] See e.g. Clyde Sanger, 'Boy's Trial May Relax Hanging Law', *Guardian*, January 23, 1967, 9; 'Truscott Case Experts Disagree on Death Time of Lynne Harper', *Gazette*, October 12, 1966, 1.
[48] 'The Trial of Mareo', *New Zealand Herald,* February 21, 1936, 13; Redmer Yska, 'Veronal: who remembers veronal?', *Matters of Substance*, August 2016, 31.

light.[49] The prosecution experts, led by the pathologist, Gilmour, based their interpretation of the murder on the evidence of Mrs Mareo's friend and probable lover, Freda Stark. Their view was that Mrs Mareo was given an overdose of veronal the last time she regained consciousness, which coincided with her drinking of a glass of milk prepared by Mareo.[50] They contended that Mrs Mareo could not have regained consciousness once she took an overdose of veronal, and Mrs Mareo would have recovered eventually if she had not taken a further dose that night.[51] The prosecution experts, all of whom were local New Zealand doctors, agreed during Mareo's trials that they had limited experience with veronal poisoning, they had never seen a case of murder by this method, and their theories were based on textbook knowledge. On the other hand, the defence expert argued during the second trial that Mrs Mareo could have sought out and taken more veronal by herself while she was under the influence of 'automatism', a state in which she could have found more veronal unconsciously and ingested all of it.[52] They also alleged that it was possible for Mrs Mareo to regain consciousness even after she took an overdose of veronal, before dying of the overdose.[53] After Mareo was convicted of the crime in the second trial, the case attracted international attention when Mareo's supporters contacted two prominent English toxicologists, Sir William Willcox and Dr Roche Lynch, to evaluate the case. Both experts openly supported the defence theory as being more probable than the prosecution's, which led Mareo's supporters to petition Parliament for a review of the case.[54] Newspapers followed medical evidence in the Mareo case closely and publicised the very public disagreement between experts about how Mrs Mareo died.

The prosecution's medical witnesses presented a united front in supporting Gilmour's contention that Mrs Mareo was murdered. One of the weaknesses in the defence case during Mareo's first trial was that they did not call any medical evidence in support of the defence case, and chose to only cross-examine the prosecution medical witnesses instead. During the first trial, the defence suggested that Dr E. B. Gunson, another prosecution medical witness, was influenced by Gilmour's opinions in favour of the Crown's case. Gunson had little experience with poisoning cases. He was a general practitioner who specialised in heart problems. He only saw four cases of veronal poisoning,

---

[49] Lynch, *No Remedy*, pp. 117-118; Charles Ferrall and Rebecca Ellis, *The Trials of Eric Mareo* (Wellington: Victoria University Press, 2002), pp. 52-54, accessed April 30, 2019, http://nzetc.victoria.ac.nz/tm/scholarly/tei-FerTria-t1-front-d4.html.
[50] 'Wife Murder Charge', *New Zealand Herald,* February 22, 1936, 15; Ferrall and Ellis, *Eric Mareo,* p. 32.
[51] 'Murder Charge', *New Zealand Herald,* June 11, 1936, 15; Ferrall and Ellis, *Eric Mareo*, p. 32.
[52] 'Defence of Mareo', *New Zealand Herald,* June 12, 1936, 15.
[53] 'Defence of Mareo', *New Zealand Herald,* June 13, 1936, 15.
[54] See for e.g. 'Mareo Murder Case', *Press,* July 20, 1942, 4; 'Mareo Petition', *New Zealand Herald*, September 16, 1944, 8; Ferrall and Ellis, *Eric Mareo*, p. 122

all of which were misadventure cases, in the three years prior to the Mareo case.[55] While he denied that Mrs Mareo had shown symptoms of a person who was more susceptible to veronal during the trial, he did not explain why the symptoms of a person more susceptible to veronal would be different from a normal person, or what these symptoms were.[56] Under cross-examination, Gunson said he and Gilmour submitted written opinions separately but agreed that they had discussed aspects of the case with each other before the trial.[57] Even though he insisted that his view was independent, it is plausible that Gilmour's views might have swayed Gunson's opinions, given Gunson's seemingly limited knowledge about veronal poisoning. In the second trial, Dr John Dreadon, the doctor who attended Mrs Mareo shortly before her death, admitted that he had not read up on automatism carefully before appearing for the prosecution.[58] This indicates he had closed his mind to other suggestions, so he was not prepared to entertain the defence theory at all. The discussions in this section support Charles Ferrall and Rebecca Ellis' argument that the content of prosecution's medical testimonies during the second trial was 'often extremely unconvincing', not only because the prosecution contradicted their own evidence,[59] they also refused to consider other theories despite their lack of experience. However, the effectiveness of a united front is evident when the defence lawyer made the observation during the first trial that prosecution medical witnesses 'unconsciously [became] advocates for the Crown', as he pointed out the experts 'devoted all their energies to putting forward and sustaining [Crown's theory] and blocking up all loopholes of escape.'[60] Additionally, the prosecutor later capitalised on the greater number of prosecution experts in the second trial by pointing out that the defence only called one practising medical practitioner, Dr E. W. Giesen, to dispute the prosecution medical evidence. He argued that '[surely] out of the thousands of medical men in New Zealand there must have been some who would have come forward in the interests of justice to support Dr. Giesen.' He further noted that the prosecution doctors were 'reputable men, who gave evidence with certainty and who were supported by textbooks.' Given that there was little literature regarding murder by veronal poisoning and few definitive answers, the disagreement over the medical evidence could only be settled by the credibility and persuasiveness of the experts. It is clear that the prosecution prepared their witnesses and medical evidence as thoroughly as they could under the circumstances. The medical experts took advantage of the strength of their number to make their conclusions seem more convincing. The defence counsel objected to the prosecutor's delineation of Dr Giesen's

[55] 'The Trial of Mareo', *New Zealand Herald*, February 25, 1936, 11.
[56] Ferrall and Ellis, *Eric Mareo*, p. 43.
[57] 'The Trial of Mareo', February 25, 1936.
[58] 'Murder Charge', *New Zealand Herald*, June 6, 1936, 17.
[59] Ferrall and Ellis, *Eric Mareo*, pp. 60-61.
[60] 'Mareo Guilty'.

evidence in this manner, but the judge 'thought [the prosecutor's] comment was within his rights'.[61] This indicated the judge accepted this measure of the experts' trustworthiness to be reasonable.

After Willcox's report was released, P. P. Lynch, a New Zealand pathologist who was no relation to Roche Lynch,[62] attempted to bolster the prosecution's case by lending his support to the prosecution's theories retrospectively. Lynch produced a report after he was asked by the Attorney-General's office to review the case, and he published a 'barely edited' version of his report and his response to Willcox's conclusions in his autobiography. [63] Ferrall and Ellis critiqued Lynch's statements and arguments in their work, but a closer analysis of Lynch's chapter on the Mareo case in his autobiography is given here. While P. P. Lynch was clear that his opinions were only based on the transcript of Mareo's second trial and Willcox's report,[64] he did not acknowledge the limitations of those two sources in forming his opinions. For example, Lynch did not discuss previous inconsistent statements made by Stark. This is important because the prosecution based their entire case of murder on Stark's observations.[65] Although Lynch insisted that he was impartial, he displayed some bias against Mareo. For example, he recounted how Mareo had two former common-law wives who he lived with before he married the victim, and that Mareo was in financial difficulties. These facts had little relevance to the scientific issues of the case, but served to cast Mareo's morality and lifestyle in an unfavourable light. Lynch was also possibly influenced by Gilmour, who he had worked with during the Bayly trial, because he mentioned discussing the case with Gilmour after he was charged with reviewing the matter. As Simpson did with Penistan, Lynch attempted to bolster Gilmour's reputation by calling him 'experienced', and he mentioned that Gilmour was conducting examinations at the university when Lynch conferred with him. He downplayed the public controversy in the medical evidence by describing the disagreement as limited to 'some uneasiness in the minds of many persons with a direct interest in the trial'. While Lynch acknowledged that Willcox was a noted toxicologist, he tried to counter Willcox's unfavourable conclusions by criticising parts of Willcox's report as '[bearing] little relationship to the recorded evidence'. He opined that Willcox's conclusions were incorrect because of his state of health, as Willcox died shortly after he completed the report. However, Lynch had no evidence showing that Willcox was mentally incapacitated at the end of his life.[66]

---

[61] 'Mareo Trial Ending', *New Zealand Herald*, June 17, 1936, 15.
[62] Smith, *Mostly Murder,* p. 298.
[63] Ferrall and Ellis, *Eric Mareo*, p. 176.
[64] Lynch, *No Remedy,* p. 119.
[65] Ferrall and Ellis, *Eric Mareo,* p. 50.
[66] Lynch*, No Remedy*, pp. 115-116, 118-119, 125-126.

In dismissing all of Willcox's conclusions, Lynch's language in his report 'verged on the violent' as he indignantly asserted that New Zealand doctors' conclusions were sound. Ferrall and Ellis argue that the British toxicologists' findings were 'enormously embarrassing' to the New Zealand doctors. They not only supported the defence theory, they 'also cast serious doubts on [New Zealand experts'] professional competence.'[67] Lynch responded strongly to defend the reputations of New Zealand doctors' expertise in forensic toxicology. For example, Roche Lynch stated in his 1944 declaration that he thought local New Zealand doctors did not have enough experience with veronal poisoning,[68] which all the prosecution experts readily admitted to during Mareo's trials. However, P. P. Lynch overreacted in his defence of the prosecution theories. He said Roche Lynch's observations 'are both ungracious and discourteous to doctors about whom he can know very little.' He accused Roche Lynch of '[attempting] to belittle the professional standing of the medical men'.[69] By defending the New Zealand doctors, P. P. Lynch was protecting both the doctors' reputation and the scientific theories they espoused. The prosecution doctors' professional standing and the safety of Mareo's conviction based on Crown medical theories are related matters in any re-examination of the court's decision, as undermining one would bring the other into question. Thus, P. P. Lynch attempted to portray the controversy as an unfounded and possibly underhanded attempt to challenge sound scientific theory.

P. P. Lynch tended to be defensive and obstinate about his views when challenged by other experts. His defensiveness might have stemmed from his tendency to advise the prosecution rather than the defence, and lack of challenges to his own views from other experts because there were comparatively few trials where defence experts were called during Lynch's career.[70] Lynch admitted that he 'came closest to victims in all the investigations with which [he] was associated, and was perhaps less likely than the public to sympathise later with the killers.'[71] This attitude was evident in the first trial of James Wilson (1954, New Zealand), where a husband was accused of poisoning his wife with arsenic. Rather than deferring to Sir Sydney Smith's extensive expertise in arsenical poisoning crimes, Lynch insisted that Smith had made 'a mistake of a decimal point' in an established publication the defence was relying on, which changed the interpretation of the amount of arsenic found in the victim's hair. Lynch eventually retracted his dissent when Smith was consulted in person

[67] Ferrall and Ellis, *Eric Mareo,* p. 141-142.
[68] Melville Harcourt [Criticus, pseud.], *I Appeal* (Auckland: Oswald-Sealy, 1945), p. 166.
[69] Statement by P. P. Lynch, October 16, 1944, Eric Mareo Papers, Department of Justice, Wellington, quoted in Ferrall and Ellis, *Eric Mareo,* p. 142.
[70] Lynch, *No Remedy,* pp. 19-20; L. P. Leary, *Not Exactly Legal* (Christchurch: Whitcoulls, 1977), pp. 153, 164.
[71] Lynch, *No Remedy*, p. 19.

and confirmed the findings in his published article.[72] As Lynch also aimed to portray himself positively in his autobiography like Simpson, he did not mention the Wilson case at all, and used the official inaction in the Mareo case to support his conclusions. He quoted the Justice Department spokesman at the end of his chapter on the Mareo case that 'the reports of these local medical specialists were so devastating the petition to the Parliamentary Committee [by Mareo for his case to be reviewed] was not proceeded with.'[73] In fact, Mareo's supporters petitioned Parliament three times, and the last hearing was adjourned to allow Mareo to seek expert advice on Lynch's and other New Zealand experts' rebuttal to Roche Lynch's report. Roche Lynch responded to the New Zealand experts' evidence in a further declaration for Mareo's appeal in 1945. Ferrall and Ellis stated this hearing never resumed because 'the petition was overtaken by the events of 1945' and it was withdrawn in 1946, when Mareo's appeals to the Court of Appeal were rejected.[74] Therefore, Lynch imposed his own interpretation onto official inaction to give credibility to medical evidence from New Zealand experts, and portrayed his evidence as effective in eliminating all alternative theories, when in fact the controversy remains unresolved.

Forensic medicine in an adversarial system

The portrayal of disagreements in forensic medicine was subsumed by the conflict at the heart of the adversarial process. Britain, Canada and New Zealand have adversarial justice systems, where two opposing parties argue their own case before an impartial judge or jury who determines the truth.[75] The rationale of this system is that the truth is found by testing each party's evidence through cross-examination. Therefore, it is not unusual from the outset for feuding individuals to advance completely different theories of events. Scientists also often disagree with each other. However, their opinions have value as long as they are honestly held and supported by evidence through experimentation. Science is constantly evolving as new discoveries are made, so there are always uncertainties which medical experts cannot eliminate.[76] Disagreement between scientists was seen in the Peter Queen case discussed in Chapter One. Even though Glaister Sr. and Smith

[72] Leary, *Not Exactly,* pp. 159, 163.
[73] Lynch, *No Remedy*, p. 126.
[74] Ferrall and Ellis, *Eric Mareo,* p. 124, 143.
[75] *Dictionary of New Zealand Law*, s. v. 'Adversarial System', accessed September 17, 2019, https://advance.lexis.com/document/?pdmfid=1230042&crid=9430e618-003b-429b-a912-0278b751d833&pddocfullpath=%2Fshared%2Fdocument%2Fanalytical-materials-nz%2Furn%3AcontentItem%3A5F46-GPT1-F528-G048-00000-00&pddocid=urn%3AcontentItem%3A5F46-GPT1-F528-G048-00.
[76] Richard Saferstein, ed., *Forensic Science Handbook*, vol. 3 (Upper Saddle River, New Jersey: Pearson Education, 2010), pp. 2, 23.

reached opposing conclusions about the guilt of the defendant, they each claimed a scientific basis to their conclusions and they were both regarded as eminent experts of their time.[77] Therefore, there is an uneasy tension between the lawyers' and the scientists' approaches when it comes to the pursuit of truth. As a handbook for forensic scientists points out, a lawyer 'is trained to approach truth by argument, whereas a scientist is trained to approach truth by testing.'[78]

This tension is illustrated by one pitfall of the adversarial justice system. Not all of the people involved in decision-making have specialised knowledge to make an informed judgment about the soundness of scientific interpretations that have been advanced. This means they cannot necessarily distinguish between meritorious theories from others which are not widely accepted. This is seen in the Mareo case. None of the medical experts who appeared in Mareo's trials were toxicologists, but as finders of fact the juries were expected to make decisions about the medical evidence and to judge Stark's credibility. This led Melville Harcourt, writing as 'Criticus', to comment that 'the ignorance of the jury was abysmal'. Furthermore, members of the Select Committee who were chosen to hear Mareo's petition were not medical experts. Harcourt seized on this fact to argue that their conclusions were unfair, because they were not in a position to judge which medical expert or theory should be trusted.[79] Similar criticisms could apply to the trial jury in the Truscott case. Although the jury was expected to weigh up irreconcilable medical evidence between prosecution and defence, some jurors indicated that they believed Truscott to be guilty on all of the contradictory evidence and placed some weight on the fact that Truscott himself did not give evidence in the trial.[80] There was no suggestion any of the jurors had specialised knowledge of forensic medicine or forensic science. The same reservations could apply to official inquiries into the Evans matter, as both Scott Henderson and Brabin were lawyers by training rather than scientists.[81] When arguments about medical or scientific issues were raised, the contradictory interpretations were usually given equal attention in the newspapers. The newspapers published letters exchanged between Kennedy and Teare about the vaginal bruise and whether Mrs Evans was raped,[82] discussed both Truscott's and the Crown's medical evidence about the victim's time of death,[83] and described

[77] Compare Glaister Jr., 'The Trial of Peter Queen'; and Smith, 'Condemned by One Word'.
[78] Saferstein, *Forensic Science*, p. 1.
[79] Harcourt, *I Appeal*, pp. 74, 79.
[80] Jamie Portman, 'Truscott Jury', editorial, *Calgary Herald*, March 30, 1966, 4.
[81] 'Secret Evans Inquiry to See Christie', *Daily Mail*, July 7, 1953, 1; 'Judge to Head Inquiry on Timothy Evans Case', *Times,* August 20, 1965, 8.
[82] See for e.g. Donald Teare, 'Ten Rillington Place', letter to the editor, *Sunday Times*, March 5, 1961, 39; Ludovic Kennedy, 'Ten Rillington Place', letter to the editor, *Sunday Times*, March 12, 1961, 39.
[83] See for e.g. Stuart Lake, 'Truscott Family Waits Patiently for Word on Hearing Decision', *Star-Phoenix*, November 24, 1966, 8.

diverse medical theories in the Mareo case.[84] To the average reader who might not grasp the intricacies of medical concepts, it would have been easy to accept inconsistencies in the scientific evidence as part of a bigger conflict between the parties without critically examining the validity of the scientific evidence itself.

When two completely irreconcilable scientific views are presented by two experts, the outcome of the trial is partially dependent on the performance of the witness and the comprehension of relevant concepts by the judge or the jury. The importance of these factors led to publications of guidelines in scientific journals about how to give evidence in court to create the best impression.[85] When there was conflicting scientific evidence, medical experts used their reputations and presentation in the witness box to influence the judges and the juries favourably towards their own evidence. The effect of a good performance by an experienced witness was demonstrated in the 1966 Truscott appeal. Dr Charles Petty was an American expert who gave evidence for Truscott supporting a later time of death than the time Truscott and the victim were seen together, by which time Truscott would have had an alibi. Petty was reported to have carried out 'about 400 autopsies a year' when he first gave evidence.[86] But after Simpson declared he had carried out 100,000 post-mortem examinations over thirty-one years, he immediately 'startled' the Court so much that Simpson repeated it 'in almost a shout' when one of the judges asked him to confirm his estimate.[87] With this introduction, Simpson successfully began the process of undermining the previous evidence given by Petty, as he argued there was nothing wrong with Penistan's conclusions. Although Simpson's estimate was questioned in the media during the appeal, he explained that London was 'a very large city with some 10,000 deaths requiring examination each year'[88] and he performed post-mortem examinations 'at the rate of some 10 or 20 a day', adding that he had 'two assistants and they also are very busy.'[89] In Mareo's second trial, the prosecutor emphasised the reputation of prosecution experts, which is described above. The jury was already so confused by contradictory medical theories that they asked to have the opportunity to read typed notes of evidence.[90] It is likely that the jury was swayed by the combined experiences of the medical experts when they decided that Mareo had indeed poisoned his wife.

---

[84] See for e.g. 'Murder Charge', *New Zealand Herald*, June 10, 1936, 17.
[85] See for e.g. F. L. G. West, 'The Medical Witness', *New Zealand Medical Journal* 53, no. 298 (December 1954): 580-585.
[86] Duart Farquharson, 'Truscott Case Review: Doctor Disputes Time of Death', *Calgary Herald*, October 8, 1966, 3.
[87] 'Truscott Case: British Expert Supports Crown'.
[88] 'Truscott Case Publicity Hit', *Star-Phoenix,* May 6, 1967, 1.
[89] 'Won't Give Up Fight: Truscott Defenders Hopeful', *Windsor Star,* May 6, 1967, 25.
[90] 'Mareo Retrial Continued', *Press,* June 10, 1936, 18.

The expert witnesses' presentations of their evidence in court also plays an important part in whether they are believed. Given that judges and jurors are not scientific experts, it is to be expected that they would place greater weight on concepts and ideas they could comprehend and evaluate. Helpern contrasted Simpson's and Camps' styles in his memoirs. He said Camps 'became rather entangled in his testimony, as he was a somewhat incoherent speaker; his brain raced ahead of his tongue.' In contrast, Helpern claimed Simpson had 'taken over from that legendary pre-war figure, Sir Bernard Spilsbury' and had a 'polished manner in court'.[91] Once Simpson gave evidence, a reporter commented, 'it was easy to visualize him as the veteran of hundreds of star witness roles in celebrated murder cases before Britain's high courts.'[92] Although it is unclear whether Helpern was present when Simpson and Camps were giving evidence, his description of Simpson's style is consistent with other contemporary accounts. The lawyers also showed an appreciation for the importance of appearance in the Mareo case. Even though Dr G. M. Smith approached Mareo's lawyers offering to give medical evidence favourable to Mareo, Smith's eccentricity and his casual personal appearance might have contributed to the lawyer's decision not to call Smith as a witness during Mareo's second trial. Even if the expert had the highest qualifications, the jury was unlikely to be convinced if the expert did not impress the jury with their evidence.[93] Therefore, it became more important for medico-legists to leave good impressions where there were uncertainties in the scientific evidence.

As medical experts framed disagreements between scientists as a natural process in the determination of the truth, they also expressed confidence in the justice system to make the right decision in the end. This attitude is seen in Glaister Jr.'s assertion that he did not believe a 'perfect crime' existed and he was confident the British justice system would prevail.[94] Simpson came to the defence of the Canadian justice system after the Supreme Court rejected Truscott's appeal. He called the publicity surrounding the Truscott appeal 'disgraceful' and was reported to be 'satisfied justice has been confirmed in the Supreme Court review.'[95] In making public statements about the case, Simpson attempted to rewrite the role of forensic medicine in the Truscott narrative by dismissing the defence evidence that threw doubt on the prosecution's estimate of the time of death. P. P. Lynch also acted in a similar manner as Simpson in the controversy over Mareo's conviction. He

[91] Knight and Helpern, *Autopsy* draft, p. 83.
[92] 'Truscott Case: British Expert Supports Crown'.
[93] Ferrall and Ellis, *Eric Mareo*, p. 121.
[94] Glaister Jr., *Final Diagnosis*, p. 219.
[95] 'Truscott Case Publicity Hit'.

stated in his autobiography that he believed the New Zealand trial system was a fair one, and he unequivocally supported the jury verdict to convict Mareo of murder. He noted the witnesses' evidence could not be fully assessed by reading notes of evidence, so he deferred to the jurors' and the prosecutor's judgment about Stark's credibility.[96] However, Lynch's confidence in the prosecutor and jurors means he overlooked contradictions in Stark's previous statements when she described how veronal was allegedly administered to Mrs Mareo,[97] and failed to weigh up whether the jurors truly understood the implications of the medical evidence when they made their decision.

Even when judges made no decisions about whether one scientific theory was superior to the other, disagreements around scientific evidence were often treated as having been resolved by decisions of the court because a favourable judgment was seen as endorsement of the science used by the successful party. For example, the Supreme Court judges in the Truscott case did not provide scientific reasoning for their preference for one party's evidence. The judges probably did not feel qualified to comment on controversial scientific evidence when they were not scientific experts. They could only rely on the witness' integrity and impartiality. Mr Justice Wilson emphasised in a *New Zealand Medical Journal* article about doctors as expert witnesses that their duty to the Court 'transcends all other considerations and requires that [the doctor] accept the personal humiliation' if they turned out to be wrong.[98] As the judges in the Truscott Supreme Court case sidestepped the controversial issues, this limited the damage to forensic medicine's reputation because the judges did not criticise the experts outright. This allowed some experts to present their disputed theories as authoritative. In Simpson's 1968 paper about the Truscott case, he gave his conclusions credibility when he stated that his explanation of the pressure marks on the victim's body 'was accepted by the Court of judges in their published judgment'.[99] Penistan did the same when he published his revised version of Lynne Harper's autopsy report in 1969. He began the report with an account of the case's progress through the court system, concluding with the Supreme Court's affirmation of 'the findings of the trial court in their entirety'.[100] The similar effect of a positive judgment could be seen in the official inquiries into the Evans case to some extent. In 1953, Scott Henderson concluded that Evans was correctly convicted of murdering his daughter. During the inquiry, Scott Henderson did not question Teare closely about the lack of a vaginal swab, instead accepting Teare's assertion that he did not see anything in the vagina.[101] In the subsequent years, the government stood by Scott

[96] Lynch, *No Remedy*, pp. 20, 125.
[97] Ferrall and Ellis, *Eric Mareo*, p. 125.
[98] J. Wilson, 'The Doctor as an Expert Witness', *New Zealand Medical Journal* 65, no. 408 (August 1966): 540.
[99] Simpson, 'Steven Truscott', 65.
[100] John Penistan, 'The Harper Autopsy', *Canadian Society of Forensic Science Journal* 2, no. 3 (1969): 53.
[101] Scott Henderson Inquiry 1953: Transcript, p. 21.

Henderson's decision and maintained that there was nothing to be gained from reviewing the matter.[102] Their refusal to conduct further inquiries meant the potential problems with Teare's practices and his findings were not questioned until the publication of Kennedy's book in 1961.

Forensic medicine and miscarriages of justice

The Evans, Truscott and Mareo cases have been labelled as miscarriages of justice by the defendants' supporters at various times. However, the merits of particular practices in forensic medicine were not debated at length in the media because they were not generally considered a socially appropriate topic. Some newspaper editors seem to censor the information according to the sensibilities of the general readership. This is evident in the *Times* account of the medical evidence given during the Brabin inquiry into the Evans matter. Even though Teare was questioned in-depth about his failure to take vaginal swabs from his initial post-mortem examination of Mrs Evans,[103] this discussion was not published in the newspaper.[104] Questions about whether swabs should have been taken from sexual assault victims were not appropriate to discuss openly or frequently in the public arena. Similar restraint was shown in Canadian television when the interviewer attempted to describe injuries on Truscott's penis as 'scratches on his body' during an interview with LeBourdais about inadequacies of the medical evidence.[105] Speculations about forensic medicine were also not encouraged generally because most journalists lacked specialist knowledge, and they risked being criticised in public if they were wrong. For example, Simpson publicly criticised LeBourdais' book as 'inaccurate',[106] and emphasised that she relied on outdated medical textbooks when he raised his counter arguments for all the medical points she mentioned in Truscott's favour.[107] In doing so, Simpson attempted to seize control of the newspaper narrative from the journalists by creating a further public sensation. He further reinforced his newspaper interviews by authoring a journal article which made his views clear. Simpson highlighted the fact that LeBourdais was not a scientist and her amateur attempts to challenge credible scientific opinions should be disregarded. Consequently, editors were more likely to de-emphasise issues in forensic science because they gained little in making these topics their focus.

---

[102] See for e.g. Notes on the Allegations that there was a Miscarriage of Justice in this Case and in the Case of Rowland, approx. 1953-54, HO45 25653/957250/60, NA; 'Inquiry into Evans Case Refused', *Times,* June 16, 1961, 21.
[103] Day 6, pp. 483-495.
[104] 'Counsel Tells Evans Inquiry of Christie's Methods', *Times,* November 30, 1965, 7.
[105] Sher, *Until You Are Dead,* p. 368.
[106] 'Truscott Case Publicity Hit'.
[107] Simpson, 'Steven Truscott', pp. 64-68.

Forensic medicine was not the only area of controversy in the major cases considered in this chapter. There were usually multiple factors which caused the alleged judicial error, and those other issues took a more prominent place in public debates and helped to de-emphasise potential scandals in forensic science. In both the Mareo and Truscott cases, the medical evidence formed important tenets in the cases against the defendants. While media coverage included discussions around disagreements in medical evidence, commentators rarely addressed it in depth. For instance, Mareo's status as a flamboyant foreigner and unemployed entertainer inspired distrust and turned the tide of public opinion against him, especially when the sordid details of the Mareos' lifestyle became public.[108] Harcourt compared Mareo with Alfred Dreyfus, hinting that their status as outsiders of the society influenced their trial verdicts.[109] As well as being accused of poisoning his wife, the prosecution also alleged immorality on Mareo's part because they argued Mareo's motive for murdering his wife was to clear his way to marry his secretary.[110] Harcourt believed that the negative associations between criminality and drugs meant Mareo was publicly judged for his loose morality when he admitted to taking veronal.[111] In the Truscott case, LeBourdais also discussed other factors that contributed to Truscott's conviction in 1959. She argued that prosecutorial bias led the police and prosecution to focus on Truscott as the culprit, to refuse further investigations of other possible leads, and to ignore inconsistencies in the child witnesses' statements.[112] Her book questioned whether the justice system in Canada was indeed fair to an accused person and inspired heated debate on this topic. For example, a commentator noted that 'innocent until proven guilty was not observed and there was an emotional climate around the [Truscott trial].'[113] Another journalist pointed to the features of the justice system which did not work in Truscott's favour, then advocated for change in the legal system to give defendants 'equal access to the resources that the Crown has'.[114] As forensic medicine did not play as prominent a part in convicting the wrong person during Evans' 1949 trial, its significance receded even further into the background as most discussions about miscarriage of justice in that case revolved around other issues such as the mental capacity of the accused and proper police conduct. Kennedy pointed out that Evans had 'an intelligence quotient equivalent to that of a boy between ten and a half and eleven, and a vocabulary of a boy of fourteen', and threw doubt on Evans' confessions at the Notting Hill police station because he believed someone of Evans' mental capabilities would not use words such as

[108] Ferrall and Ellis, *Eric Mareo*, pp. 64-68, 70-74.
[109] Harcourt, *I Appeal,* pp. 61-62.
[110] Ferrall and Ellis, *Eric Mareo*, pp. 18-19.
[111] Harcourt, *I Appeal*, p. 72.
[112] LeBourdais, *Steven Truscott,* pp. 31-32, 120-122.
[113] Portman, 'Truscott Jury'.
[114] Bruce Thordarson, 'Our Legal System', editorial, *Star-Phoenix,* March 30, 1966, 33.

'incurring' and 'whilst', which appeared in the confession.[115] This opened the possibility that the confession was written by another person and Evans was coerced into agreeing with it.[116] The issues in forensic medicine became one of many problems which contributed to the possible miscarriages of justice, so forensic medicine was not portrayed as the dominant issue spearheading the controversy.

Given their identification with miscarriages of justice, the Evans, Truscott and Mareo cases were utilised by opportunistic campaigners to further their cause for the abolition of capital punishment. This means that in much of the media coverage, the details of the cases were downplayed in favour of greater debates around the morality and viability of capital punishment. For instance, those who sought to abolish the death penalty utilised the Evans case to show the disastrous consequences of executing the wrong man, especially as Christie went on to murder four more women before he was arrested. This is evident when Geoffrey Bing, a Member of Parliament, argued in the House of Commons that the Scott Henderson report 'affects the whole controversy over the death penalty.' He argued that 'if it is possible to hang an innocent man, obviously that is one of the reasons for doing away with the death penalty.'[117] Teare's interpretation of the bruise in the vagina and his failure to take a vaginal swab to confirm sexual assault was not mentioned at all. Similarly, the Truscott case was controversial in the first place because a death sentence was passed on 'the youngest convicted murderer in Canada since 1875'.[118] When LeBourdais' book on the Truscott case started making waves, Truscott's cause to appeal his conviction was absorbed into general discussions about capital punishment in Canada at the time. This is seen in the debates on the death penalty in the Canadian Parliament. The *Guardian* reported that '[the] debate has been considerably influenced by a book "The Trial of Steven Truscott"…. Abolitionists have been able to press more cogently the argument of possible errors.'[119] This means even though the rhetoric about the cases gained widespread attention, the proponents to abolition of capital punishment did not focus on reasons which caused the miscarriages of justice. While they were concerned that an innocent person could have been executed mistakenly, their solution to the problem was to abolish capital punishment rather than fixing the issues which contributed to the conviction of the innocent.

[115] Kennedy, *Ten Rillington Place*, pp. 53, 105.
[116] 'Doubts in Evans Confession', *Times*, December 17, 1965, 6.
[117] 518 Parl. Deb. (5th ser.) (1953) col. 1436 (UK).
[118] 'Boy Murderer Reprieved', *Birmingham Post,* January 23, 1960, 7.
[119] Clyde Sanger, 'Canada Votes on Death Penalty', *Guardian*, April 5, 1966, 11.

On the other hand, the Mareo case was not used in a campaign to abolish the death penalty. When the Labour government came to power in 1935, all death sentences were commuted to life in prison. Capital punishment was abolished in 1941 and it was not reinstated until 1950 when the National Party returned to government.[120] Therefore, from the time Mareo went to trial in 1936, it was unlikely that he would be executed. However, the Mareo case was still utilised by Harcourt to make more general comments about the justice system and the eradication of human rights. For example, Harcourt argued the government's disregard of scientific evidence in favour of Mareo 'is very disturbing to all democratically minded citizens.… it means the formerly inviolable rights of the British citizen in this country are now not worth the paper they are written on.' While Harcourt mentioned the prosecution's disputed medical evidence, he did not provide a detailed criticism of it and he did not discuss the issue at any length. His main objections to the prosecution evidence were that the New Zealand pathologist did not specialise in toxicology, and that the medical theory was based on observations of Stark, who was 'enigmatic and somewhat distasteful'. He readily accepted that Willcox's report on the case refuted everything the New Zealand experts contended, without analysing the content of the medical testimonies. Instead he concluded that it was the authorities who were at fault because '[arguing] with the authorities in this country is like arguing with an ignorant man'.[121] Even though Harcourt was not arguing for the abolition of capital punishment and he did offer limited criticism of the medical evidence in the case, he used the Mareo case to support his overall argument that the government was tyrannical.

The three miscarriage of justice cases discussed above clearly show that while issues in forensic medicine might have contributed to judicial error, these problems were overtaken by themes which the public could comprehend and relate to easily. This means there was less critical scrutiny about forensic medicine services, which left the reputation of the field largely intact.

Evaluation of the image of forensic medicine amid potential scandals

In relying on their experiences and presenting a united front, the experts successfully lent weight to disputed medical theories and gave them credibility in the Courts. Sher points out the shortcomings of the majority judgment from the Supreme Court which heard Truscott's appeal in 1966. He argues that, rather than conducting a critical analysis of the scientific evidence, it appears the judges ultimately sided with the Crown's scientific evidence because there were more Crown witnesses

[120] Ministry for Culture and Heritage, *New Zealand History*, s. v. 'The Death Penalty', accessed September 9, 2019, https://nzhistory.govt.nz/culture/the-death-penalty.
[121] Harcourt, *I Appeal*, pp. 63, 73-74, 78-79.

than defence witnesses. This is despite the fact that one of the Crown experts, Sharpe, agreed with the defence theory that stomach contents could not be used to determine the exact time of death.[122] This could be contrasted with the Ontario Court of Appeal's discussion in 2007, where the prosecution still found an old pathologist who dogmatically insisted that Penistan's contentions were sound. It was easier for the judges to discount this pathologist because he did not present well and he had no support from his colleagues.[123] Arguably the same phenomenon occurred with the Mareo trials in 1936 as the jury returned guilty verdicts in both trials. The prosecution medical witnesses outnumbered the defence on both occasions.[124] Similarly, as Camps and Nickolls supported Teare's original investigation into the Evans murders, Brabin noted that their evidence was 'convincing' and agreed with their major scientific contentions about the case.[125] A united front by medico-legists was, thus, largely successful in leading the courts and the judges to accept potentially controversial forensic evidence.

The reputation of forensic medicine was also bolstered by decisions of higher courts as they confirmed the status quo. Although the court's favourable verdict had not necessarily been effective for medico-legists to avoid continued controversies, a good judicial outcome gave the successful party ability to minimise potential scandals. If the official verdict confirmed the findings of the earlier court, there was limited incentive for further discussions about contradictions in the medical theories immediately afterwards. For example, the Truscott case lost its momentum shortly after Truscott's 1966 appeal affirmed his conviction. Helpern described the lack of further public discussions about the case after the appeal, stating that 'with the passage of more time, it seems as if [well-known cases like Truscott] never even happened.'[126] Public interest in the case was arguably only revived after Truscott participated in a television documentary, *The Fifth Estate,* in 2000, which culminated in his exoneration in 2007 by the Ontario Court of Appeal. Sher recounts that over 500 people sent letters and emails to the channel after the documentary was aired, 'an exceptional response to a single program.'[127] On the other hand, although Brabin determined that Evans was probably not guilty of killing his daughter, he confirmed the scientific findings of the pathologists and Nickolls. He was also satisfied that the bruise in Mrs Evans' vagina was not caused after death, and the proof which Kennedy touted as being strongly indicative that Christie murdered Mrs Evans

[122] Sher, *Until You Are Dead*, p. 441.
[123] Truscott (Re), paras [165]-[166].
[124] 'Mareo Guilty'; 'Mareo Trial Ending'.
[125] Brabin, 'Inquiry Report', chap. 6.
[126] Knight and Helpern, *Autopsy* draft, p. 85.
[127] Sher, *Until You Are Dead*, p. 513.

resulted from a misunderstanding.[128] There was no need to admonish Teare officially or in public for incompetency. Any oversight by Teare had already been addressed by routine tests and new scientific discoveries at the time of the second inquiry. Although various true-crime writers continued to discuss and speculate about the case,[129] the Home Office's collection of press cuttings about the Brabin report reveals that most writers accepted the finding that Mrs Evans was probably not sexually violated. There was only one newspaper account which pointed out that there was some doubt over this finding because of the lack of a swab test, but even then the writer did not name the pathologist involved and he did not propose that the pathologist needed to face disciplinary action.[130] The review of original cases thus gave a sense of finality to some potential issues in forensic medicine and limited the damage to forensic medicine's reputation.

Despite the contradictory medical theories in the Truscott and Mareo cases, the public was still likely to value scientific evidence rather than discounting it simply because there was an alternative theory. As discussed in Chapter One, there was positive publicity when scientific evidence prevailed in determining the guilt or innocence of an individual. This image of science aiding detection of crime was disseminated and reinforced by the medico-legist's writings. By normalising scientific arguments within the justice process as good practices, they fit in with the narrative that science ensures the truth is revealed. After the Supreme Court confirmed Truscott's conviction, an editorial in the *Edmonton Journal* proclaimed they 'doubted Mrs LeBourdais' book met the test' from the start and called the subsequent outcry an 'uninformed controversy'.[131] Although the editorial did not specifically discuss forensic medicine, it seemed to blame LeBourdais for misleading the public with her analysis of the scientific evidence. The newspaper also demonstrated their confidence in the prosecution's, or more specifically, Simpson's evidence by quoting his comments about the Truscott trial. This signals the editor's preference and reliance on the opinions of a renowned scientist over an amateur. Similarly in the Mareo case, even though there was public unease about the contradictory medical evidence, Mareo's supporters remained convinced that if there was an independent medical panel to review the case, then the accurate scientific theory would prevail. They still believed expert scientists could assess whether the Crown's medical evidence was accurate.[132] Despite disagreements between scientists, the belief in the power of science to reveal the truth was still strong among laypeople.

---

[128] Brabin, 'Inquiry Report', chap. 6.
[129] See for e.g. Eddowes, *The Two Killers of Rillington Place*; Root, *Frenzy! Heath, Haigh and Christie*.
[130] Harold Evans, 'The Most Improbable Murder,' *Sunday Times*, October 16, 1966, HO 45 25662/957250/255, NA.
[131] 'Comment: Postscript to Truscott Case', editorial, *Edmonton Journal,* May 15, 1967, 4.
[132] 'The Mareo Case', *New Zealand Herald,* February 17, 1943, 2.

It is also evident good presentation and reputation of medico-legists played a part in ensuring that potentially disputed theories were accepted, which further preserved the image of forensic medicine. For instance, after Simpson presented his paper on the Truscott case to the Medico-Legal Society in London, a member of the audience said Simpson 'confirmed one's impression of his integrity, skill and thoroughness'.[133] While it is possible that this listener was biased in favour of Simpson, it is significant that none of the discussions after Simpson's paper challenged the use of stomach contents to estimate time of death. However, Simpson was not always successful in swaying public opinion. As discussed above, many commentators were sceptical that Simpson truly performed 100,000 autopsies in his career, as they believed the number he quoted was unrealistic.[134] However, these public commentaries about Simpson's estimate appear to have had little negative effect on the image of forensic medicine itself, as Simpson was able to justify his experience to interested journalists after the Supreme Court's decision was announced.[135] It is arguable that Simpson's experience and reputation quelled suggestions that his theories were incorrect, and stifled criticisms about his evidence to some extent. Even when a letter writer to the *Ottawa Journal* criticised Simpson's proclamation that 'justice has been confirmed' by pointing out that similarly eminent experts gave evidence in favour of the defence, the writer did not explore the contradictions in forensic medicine any further.[136]

Forensic medicine's positive reputation also remained largely intact because public discussion of scandals in forensic medicine was limited. Conventional ideas of modesty and lack of medical knowledge among laypeople restricted these discussions. For example, although there were public exchanges of letters in the *Sunday Times* by Kennedy and Teare arguing whether the bruise in Mrs Evans' vagina was an indication of rape or not,[137] other letters to the editor in the *Times* and editorials in the *Guardian* about the case did not discuss the scientific aspects of the case at all.[138] Popular attention was usually directed at the issues highlighted by the cases that were more likely to have an impact on society itself and the status quo. The preoccupation with issues other than the quality of forensic medicine is evident in some of the written representations in the Evans case prior to the beginning of the Brabin inquiry in 1965. Very little mention was made of forensic medicine in

[133] Simpson, 'Steven Truscott', 70.
[134] See for e.g. Win Mills, 'Cool Reward for Return of Two Hot Movies', editorial, *Ottawa Citizen*, October 15, 1966, 19.
[135] 'Won't Give up Fight'.
[136] G.E. Potter, 'Reasonable Doubt', letter to the editor, *Ottawa Journal*, May 13, 1967, 7.
[137] See for e.g. Teare, 'Ten Rillington Place', and Kennedy, 'Ten Rillington Place'.
[138] See for e.g. John Grigg, 'Innocence of Evans', editorial, *Guardian*, April 26, 1965, 16; Linton Andrews, Ian Gilmour and John Grigg, 'Evans and Christie Trials', letter to the editor, *Times*, September 16, 1955, 11.

these submissions; in fact, the writers were not necessarily well-informed about the scientific findings when they wrote in support of Evans. Even after Nickolls and Camps published the finding in 1953 that none of the pubic hair found in a tin in Christie's flat belonged to Mrs Evans, a petitioner to the Brabin inquiry still asserted that Mrs Evans' pubic hair was found in the tin.[139] Issues other than forensic medicine also left a great impression in literature surrounding the Truscott case. Anne-Marie MacDonald, a novelist, based her novel *The Way The Crow Flies* on the facts of the Truscott case. Although it is clear that she borrowed some snippets of medical evidence from the case,[140] the crux of the novel emphasised the capriciousness of child witnesses as the innocent defendant of her story was convicted of rape and murder on the children's evidence. While children's evidence can be given weight in court proceedings, care needs to be taken when interviewing children. Children could be suggestable because they could be providing answers that they believe the adult interviewer wishes to hear, or giving evidence after they have synthesised the information they received after the event with their actual memory of the event.[141] The unreliable testimonies of child witnesses were also instrumental in forming the case against Truscott. One of the key child witnesses in the Truscott case, Jocelyne Gaudet, later claimed that she was questioned by three police officers at midnight who 'kept trying to change [her] words' when she gave the statement that was used in the original trial.[142] While it is arguable that the children's evidence is a better narrative element for driving the plot and creating dramatic tension in the story, MacDonald's choice also reveals her interest in human aspects of the case as a non-scientist writer, rather than medical elements. These examples show that even though the cases were infamous, the forensic medicine aspect of the cases did not necessarily dominate the public imagination, so any scandal was minimised.

Furthermore, as campaigners both for and against capital punishment and other causes of justice further dominated discussions of the cases considered in this chapter, the reputation of forensic medicine was able to remain unchallenged. This is evident in the Evans case, which was brought into the debates surrounding capital punishment to challenge the British justice system.[143] The same trend could be seen in letters to the editor in the Truscott case. Instead of discussing the contradictions in the medical evidence, the majority of the letters inspired by the Truscott case

---

[139] Harry Rule, file dated September 13, 1965, CAB 143/3, NA.
[140] Anne-Marie MacDonald, *The Way The Crow Flies* (New York: HarperCollins, 2003), pp. 375-376.
[141] Jeffrey Nels Westman, 'No Matter How Small: Child Witness in Canadian Criminal Trials', *Appeal: Review of Current Law and Law Reform* 23 (2018): 83.
[142] Sher, *Until You Are Dead,* p. 539.
[143] Compare J. P. Eddy, 'For and against the Return of the Rope', letter to the editor, *Birmingham Post,* November 12, 1969, 8; and Reginald A. Smith, 'No Pardon', letter to the editor, *Times,* June 20, 1961, 13.

focussed on the fallibility of the justice system and the fairness of capital punishment. Notably, after the confirmation of Truscott's conviction, one reader wrote to the *Calgary Herald* arguing that the continued discussion over the case was a 'hysteria' and saw further argument against the conviction as a sign that 'we are fast approaching anarchy'.[144] She seemed to claim that the implications of the Truscott appeal did not only affect the people involved in the case, but the whole country. Similarly, the debate around the alleged inadequacies of the medical evidence in the Mareo case was imbued with wider implications about the fairness of the justice system. A letter writer contended in the *Otago Daily Times* that justice demanded a review of the matter because '[neither] the jury nor anyone else connected with the case at the time of the trials had sufficient knowledge concerning veronal to sentence a man to life imprisonment…'[145] This letter led another to write in defence of the justice system, saying that '[there] is no country where a man gets a fairer trial than New Zealand'.[146] In contrast, there was a greater emphasis on successful science in cases where the science that was relied upon by the Court was undisputed. For example, an editorial about the Ruxton trial in 1936 stated 'If the conduct of the trial has been in the best traditions of British justice, no less satisfactory has been the conduct of the police and the painstaking scientific investigators on whose evidence the Crown case mainly rested'.[147] The writer immediately elevated scientific investigations to the same level of importance as the trial process by this statement, and emphasised that both were instrumental in the delivery of justice. The discussions about the cases where forensic medicine was disputed tended to focus more on capital punishment and the justice system, which played a more visible and influential part in enforcing law and order and governing the average layperson's life. As a result, potential scandals in forensic medicine were side-lined and the reputation of forensic medicine remained largely undebated and, therefore, little affected.

Conclusion

The Evans, Truscott and Mareo cases were three major cases from Britain, Canada and New Zealand respectively where the forensic medicine relied upon by the courts was controversial during the mid-twentieth century. Medico-legal experts presented a united front in these cases to excuse other experts' oversight, to support disputed scientific theories, and to denounce opposing experts' opinions. Disagreements between different medico-legists have also been common within the adversarial system, normalising conflicting opinions. Scientists embraced challenges to their own

[144] Jane Hunt, 'Truscott Case', *Calgary Herald*, May 13, 1967, 5.
[145] Fiat Justitia [pseud.], 'The Mareo Case', letter to the editor, *Otago Daily Times*, June 30, 1945, 5.
[146] Square Deal, reply to Fiat Justitia, July 5, 1945, 2.
[147] 'The Ruxton Trial', editorial, *Daily Telegraph,* March 14, 1936, 12.

theories as part of proper processes of justice, and utilised their reputation and experience to impress laypeople and inspire confidence in their medical theories. Other elements in miscarriage of justice cases such as police bias also side-lined problems within forensic medicine, because the public were more likely to take notice of issues relevant to them. The cases were also swept up by opportunistic campaigners and became associated with discussions of capital punishment. A negative image of forensic medicine was avoided as a result. The public's innate confidence in the impartiality of science remained essentially undisturbed. Courts were convinced of the credibility of disputed theories, and confirmed the status quo accordingly. Reactions from the public, as seen in letters to the editor in various newspapers, revealed forensic medicine made little impact in public debates. Instead, it appears potential scandals in forensic medicine were quelled by social mores, lack of knowledge, and respect for experts. Most discussions were dominated by arguments about capital punishment and the fairness of the justice system. This chapter went beyond the existing literature about the image of pathologists and forensic medicine by comparing three cases with potential problems in forensic medicine within different Commonwealth jurisdictions, and examining how problems in forensic medicine were downplayed or overlooked. The relative lack of awareness about the risks and issues in forensic medicine discussed in this chapter provides the background to Chapter Three's analysis of causes of reforms in forensic medicine.

Chapter Three: Reforms in forensic medicine and forensic science

The British, Canadian and New Zealand medico-legists discussed in the previous chapters were mostly successful in sustaining a positive image of forensic medicine during the mid-twentieth century, even where there were potential scandals. Contrary to Cole's claim that controversies in forensic science provided impetus for reforms,[1] scandals in forensic medicine played a very limited part in triggering major improvements to its practice during the mid-twentieth century. Instead, improvements to forensic medicine and scientific institutions in each country tended to reflect the incremental change to their crime investigation system to meet growing demands from the police and the interests of justice. As scandals in forensic medicine were downplayed in the media, it appears the positive coverage of successes in forensic medicine inspired more changes in practice. Even when medico-legists acknowledged the possibility of mistakes being made by other experts, the generalisation of the issues and the lack of a 'face' to the problems within forensic medicine diluted the negative publicity and lessened incentives for reforms. Furthermore, medico-legal practitioners seemed to characterise mistakes in forensic medicine as administrative or human errors, rather than fundamental inadequacies of the scientific theories relied upon, which also limited the types of reform introduced in forensic medicine. The confidence in medico-legists' ability to combat rising crime rates with scientific innovations undermined challenges to the authority of forensic medicine, which made widespread reforms difficult. This chapter critically examines Cole's claim in the context of mid-twentieth century British Commonwealth countries, while expanding on the limited literature about reforms in forensic science and forensic medicine in Canada and New Zealand. These discussions have more relevance than ever as the crisis in the forensic sciences is not a purely British phenomenon.[2]

Incremental nature of reforms in crime investigation systems and forensic medicine

Britain

The British government rarely prioritised reforms for its criminal investigation systems and forensic medicine. Traditionally, changes within these systems in England were instituted incrementally when the need arose. Although the coroner's office was the first official post in Britain which was

[1] Cole, 'Forensic Science and Wrongful Convictions', 714.
[2] See for e.g. 'Crisis Looms in NZ Forensic Pathology Service', RNZ, August 22, 2018, https://www.rnz.co.nz/national/programmes/ninetonoon/audio/2018659186/crisis-looms-in-nz-forensic-pathology-service.

established to investigate suspicious deaths,[3] no English coroner was legislatively required to be medically or legally qualified until the Coroner's Amendment Act 1926.[4] As evident in Folkes v Chadd,[5] case law evolved slowly to accommodate scientific expert evidence in the common law system because changes have been dependent on people bringing cases to the courts. There were no radical legislative reforms which created organisations or status for the scientific expert in court. For example, the formalised appointments of toxicological experts, the Home Office Analysts, were appointed as a result of questioning by Sir John St. Aubyn in the House of Commons around representation of suspected poisoners in 1882, after which the Home Secretary Sir William Harcourt agreed to appoint two 'independent, experienced men of science' to carry out scientific analyses and experiments officially in poisoning cases.[6] While forensic medicine gained more public attention and prestige in solving crimes during the twentieth century, the government still did not create stable governmental positions for pathologists. Although Camps and Simpson were appointed as Home Office pathologists, the lack of a centralised institution for all forensic sciences and inadequate remuneration led them to predominantly work as lecturers in universities,[7] and to assist the police outside of their commitments to the university. The Scottish administration and universities accorded forensic medicine with significance, since forensic medicine was a prerequisite for admission to the Faculty of Advocates for Scottish lawyers and a chair for medical jurisprudence was established at the University of Edinburgh in 1807.[8] Even then, prominent pathologists who worked in Scotland, such as Glaister Jr. and Smith, were still primarily university professors rather than independent contractors for medico-legal services.[9] Against this background, the system of forensic medicine in Britain was described as ad hoc. For instance, Professor Cyril Polson from Leeds University described the system of forensic science in the United Kingdom as a 'patchwork' in 1963.[10]

During the mid-twentieth century, scandals in forensic medicine did not trigger radical reforms in Britain. As discussed in Chapter Two, conflicting theories in forensic medicine did not inspire major public debates about the validity of science. Instead, calls for the establishment of a centralised institution for forensic medicine and forensic science were prompted by longstanding problems such

[3] Watson, *Poisoned Lives*, p. 154; Duvall, 'Forensic Medicine', 12.
[4] Coroner's Amendment Act, 1926 (Eng.).
[5] Folkes v. Chadd.
[6] 268 Parl. Deb. (3rd ser.) (1882) cols. 4-5 (UK).
[7] See for e.g. Bernard Knight, 'Cash the Answer to Forensic Science Crisis', May 6, 1970, GB 1239 454/6/26/1, BKP/UC.
[8] Watson, *Forensic Medicine,* p. 61; Crowther and White, *On Soul and Conscience,* p. 10.
[9] Huang, 'Sir Sydney Smith', 21.
[10] '"Perfect Murders" that Fool Doctors', *Daily Mirror,* April 17, 1963, 18.

as the lack of structure, inconsistencies in practices and quality, and the ad hoc nature of the work by forensic scientists and pathologists.[11] These issues are exemplified by the consequences of Bristol University's decision to restrict their reader in forensic pathology, Dr A. C. Hunt, to only assist Bristol's police forces and not elsewhere.[12] The decision illustrates the university's imperative to act in its own interests rather than that of the police or the justice system. The police forces who used to rely on Hunt to advise them had to find other pathologists to assist, and there was 'no other pathologist of comparable experience in [six West of England counties].'[13] It is possible this decision was prompted to some extent by the university's discontent with the unpredictable demands of a duty pathologist's work, since the university disclosed 'heavy teaching pressure' as one of the reasons for the restriction and it was the practice for pathologists to be on call to attend the scene of the crime as soon as a suspicious death was discovered.[14] Such discontent foreshadows many British universities' decisions to cease funding or teaching forensic pathology towards the end of the twentieth century, citing the lack of forensic research or publication in reputable journals.[15] There was also variation of views between different individuals and entities about the condition of forensic medicine practices in Britain and whether reform was needed at all. Camps openly argued that there was a crisis in forensic medicine because there were not enough trained pathologists, while representatives of the Home Office and the National Health Service saw no need to change or improve the situation drastically. In 1970, Knight opined that the true situation was somewhere between these polarising views.[16] Although Knight did note a 'resurgence of interest' in the management of forensic medicine, inspired by Camps and other medico-legists, which led to the creation of an Academy and a Society of Forensic Science, further comprehensive governmental reforms were not forthcoming.[17] These diverse opinions about whether reform was required appear to have weakened the medico-legists' arguments for further changes to the field. As the government maintained there was no issue with forensic medicine in practice, they were uninterested in implementing drastic changes to it.

---

[11] Pathologist, 'Verdict on Coroners: Outmoded', *Western Mail*, August 20, 1965, GB 1239 454/6/26/1, BKP/UC.
[12] Knight, 'Cash the Answer'.
[13] 'Police Lose Help of Top Scientist', *Sunday Times*, February 22, 1970, 3.
[14] Knight, *Murder, Suicide or Accident* draft, pp. 52-55; Knight, 'Cash the Answer'; 'Police Lose Help of Top Scientist'.
[15] Richard Shepherd, *Unnatural Causes* (London: Michael Joseph, 2018), p. 335.
[16] Knight, 'Cash the Answer'.
[17] 'The Scientists Who Help to Fight the Crime Battle'.

Canada

Canada's forensic services and suspicious death investigation systems could also be described as fragmentary and the changes within them were mostly gradual. There was no effort by the Canadian federal government to unify suspicious death investigations into one unitary system. As discussed in Chapter One, some Canadian states inherited the coroner structure while others adopted the medical examiner system. Although the first forensic laboratory in North America was formed in Montreal in 1913, the other two major laboratories were created in the 1930s, followed by 11 other smaller laboratories, which were opened between 1942 and 1978.[18] This shows the gradual nature of changes within the forensic science services. Even though the Association of Chairmen of Canadian Departments of Pathology submitted to the Special Committee on Science Policy in 1969 that "[units] in forensic pathology are urgently required" and should be established in university departments,[19] forensic pathology was only recognised by the Royal College of Physicians and Surgeons as a subspecialty of anatomical or general pathology in 2003. Unlike prominent British forensic pathologists who were often based in universities, it appears Canadian forensic pathologists who qualified before 2009 either gained their qualifications through training in other countries, or through apprenticeship under specialists in Canada to gain experience.[20] For instance, McGill obtained her medical degree from the University of Manitoba in 1915, but learned pathology from Dr Gordon Bell, Director of the Manitoba Provincial Laboratory, when she was an intern at the Winnipeg General Hospital between 1915 and 1918.[21] As a result of insufficient numbers of forensic pathologists, there were international recruitments to supplement local expertise.[22] The Truscott appeal in 1966 is an example of recruitment of experts from Britain and the United States. The piecemeal nature of the forensic medicine system was most evident in the 2013 report which reviewed the state of forensic science in Canada. Matthew Bowes, Christopher Milroy and Michael Pollanen noted only Alberta, Ontario, Nova Scotia and Quebec had government facilities for forensic pathology work at that point. They found interactions between forensic pathologists from different provinces have been limited, and the provincial committee of Chief Coroners and Chief Medical Examiners have had very little power to recommend reforms or issue a best practice guideline or enforce standards. At the time of the 2013 report, there were no professional standards and

---

[18] Sauvageau and Jones, 'Forensic Sciences', p. 30-31.
[19] A. C. Ritchie, ed., 'Educational, Research and Training Requirements of Academic Departments of Pathology in Ontario', in *Proceedings of the Special Committee on Science Policy,* Special Committee of the Senate of Canada on Science Policy, vol. 6 (Ottawa: The Queen's Printer, 1969), p. 6675.
[20] Sauvageau and Jones, 'Forensic Sciences', p. 32.
[21] Myrna L. Petersen, *The Pathological Casebook of Dr Frances McGill* (Regina: Ideation Entertainment, 2005), p. 3.
[22] Sauvageau and Jones, 'Forensic Sciences', p. 32.

guidelines for forensic pathologists.[23] Thus, it appears there was very little or no regulation or reform imposed on the practice of forensic medicine in Canada. The lack of regulations for forensic pathologists, who certainly played a part in solving murders prior to the twenty-first century, indicate that the Canadian government likely adopted an attitude similar to that shown by the British government and considered the existing forensic medicine system satisfactory.

While there have been some governmental reforms in Canadian forensic science services during the mid-twentieth century, they were not motivated by scandals in forensic medicine. Instead, as in Britain, it appears that changes in the forensic laboratories were driven by expediency and necessity, such as greater demands for forensic science services. For example, Deputy Attorney-General C. R. Magone brought in reforms to the forensic science laboratory in Ontario in 1951 to 'reorganise and revitalise' the institution.[24] The aims of the reforms were to provide government officials and the prosecution with facilities that they could utilise to examine and analyse scientific matters which arose from crimes, so 'the law may be enforced'.[25] While it seems unlikely that the Government of Ontario Analytical Laboratories System would recount scandals involving the laboratories in a feature article of its newsletter, Anny Sauvageau and Graham Jones also mention the reorganisation of the Ontario laboratory in 1951 without noting any significant cases which precipitated the reforms.[26] This laboratory became very popular. They processed 576 cases in 1952, and over the next five years their case load rose to 1800 cases per year. The increase in case load reflected the reliance by the police and the justice system on forensic medicine and sciences to solve crimes. The growing demand for laboratory services could also be attributed to new training programmes for investigators about the laboratories' techniques and services. It appears the popularity of the laboratory led to increased specialisation in different sciences, which in turn shaped the laboratory's structure later on.[27] By 1960, this laboratory had numerous medico-legists who could analyse stomach contents, blood, X-rays and handwriting.[28] Other than changes to the name and location of the laboratory, there appears to have been no further official 'reorganisation' of the laboratory after 1951.[29] While a Special Committee on Science Policy was appointed in the late 1960s, its purpose

[23] Matthew Bowes, Christopher Milroy and Michael Pollanen, 'Forensic Pathology', in *Forensic Science in Canada: A Report of Multidisciplinary Discussion*, ed. M. Pollanen, M. Bowes, S. VanLaerhoven et al. (Toronto: University of Toronto, 2013), pp. 13-15.
[24] Government of Ontario Analytical Laboratories System, 'The Development of Forensic Science in Ontario', *GOALS Newsletter,* no. 9 (December 1992), 8.
[25] 'The Development of Forensic Science in Ontario', 8.
[26] Sauvageau and Jones, 'Forensic Sciences', p. 30.
[27] 'The Development of Forensic Science in Ontario', 9.
[28] Francis, 'Science's Hidden War'.
[29] Sauvageau and Jones, 'Forensic Sciences', p. 30.

was simply to report on the Federal Government's policies and assess its own priorities, budget and efficiencies.[30] This means when medico-legal services made submissions to the Committee, they were not responding to specific scandals in forensic science or medicine. Therefore, there was no sense of urgency directed at improving forensic sciences and medicine from the outset, as different fields of science vied for priority in the government's attention before the Committee. It is clear that changes to Canadian forensic science services during this period were not primarily motivated by scandals.

New Zealand

It seems changes within New Zealand's suspicious death investigation system and forensic medicine during the mid-twentieth century were also not caused by scandals within forensic medicine. New Zealand inherited the office of coroner from Britain through the Coroners Ordinance 1846. While coroners were subject to several updated legislations in 1858, 1908, and 1951 which in turn restricted and clarified their jurisdictions, it appears the purpose of the updates was to tidy up older legislation to fit new circumstances and to consolidate English and New Zealand law surrounding coroners.[31] As Ian Freckelton points out, the office of coroner has an 'extraordinary capacity to "shape-shift" and adapt to meet contemporary needs'[32] while their functions remain the same. Similarly, it seems forensic pathology gradually grew from other branches of pathology to meet the needs of the courts and the police, as there does not appear to have been a clear distinction between general and forensic pathology in New Zealand during the early- to mid-twentieth century. After P. P. Lynch obtained his medical degree in bacteriology in 1924, he was appointed as clinical pathologist to the Otago Medical School, practising 'pathology in relation to patients in a public hospital'. He later became pathologist to the Wellington Hospital. Similar to McGill in Canada, Lynch developed his interest in forensic medicine while he was a staff member at the pathology department at Otago Medical School, headed by Professor A. Murray Drennan. Lynch later described Drennan as 'a man who… would surely have been a renowned medico-legal expert.' Lynch also only gained experience as a court witness when he was appointed a public analyst in the beginning of his career and learned on the job.[33] There does not appear to have been any significant domestic reforms in forensic medicine in mid-twentieth century New Zealand. Although New Zealand had

---

[30] *Proceedings of the Special Committee on Science Policy*, orders of reference.
[31] Neil MacLean, 'The Vision and the Reality: Reflections on the Evolving Role of the New Zealand Coroner in 2015', *Waikato Law Review* 23 (2015): 5-6; Ian Freckelton, 'Death Investigation and the Evolving Role of the Coroner', *Otago Law Review* 11, no. 4 (2008): 567.
[32] Freckelton, 'Death Investigation', 568.
[33] Lynch, *No Remedy,* pp. 13, 14-15, 17.

pathology departments in Otago and Auckland by 1970,[34] New Zealand still relied on international recruitment later in the twentieth century for trained forensic pathologists. Both Dr Cynric Temple-Camp and Dr Timothy Koelmeyer, who were pathologists based in Palmerston North and Auckland respectively at the end of the twentieth century, held overseas qualifications in forensic pathology before moving to New Zealand.[35] Forensic medicine in New Zealand only seems to have become more centralised in 2005, when a National Forensic Pathology Service was established. Even then, none of the newspaper reports pointed to a significant case as the trigger to the formation of the organisation, only vaguely referring to the Service's creation as the result of 'years of negotiation'.[36]

Although forensic science services in New Zealand were more centralised compared to Britain and Canada during the mid-twentieth century, they still emerged incrementally over time rather than through reforms triggered by scandals. Toxicology was first practised in the Colonial Laboratory during the 1870s when its director, Dr William Skey, conducted examinations of poisons. The Colonial Laboratory was established to conduct all chemical tests for a whole spectrum of scientific matters required by the government, such as food safety and metallurgy. Hughson and Ellis did not refer to any significant scandals in forensic science or medicine in their account of the Chemistry Division's history prior to 1981. Although they were not independent historians and it is possible they decided not to record events that did not reflect well on the Chemistry Division, it seems unlikely they would wholly omit scandals since the purpose of their work was to '[review] technical successes and failures' of the Laboratory. The reforms that occurred to the Colonial Laboratory appear to be the result of policy changes to accommodate the extension of the Laboratory's purposes rather than to improve forensic medicine and science. For example, the Colonial Laboratory became the Dominion Laboratory when New Zealand became a Dominion in 1907, and it was transferred to the Department of Scientific and Industrial Research when the department was established in 1926. This came about because of recommendations by Dr Ernest Marsden to utilise the laboratory to apply science to industrial problems, a suggestion which was supported by notable scientists like Sir Ernest Rutherford.[37] Different accounts of the changes to the Laboratory in the

---

[34] P. Herdson, 'The Place of Pathology in the New Medical School in Auckland', *New Zealand Medical Journal* 70, no. 448 (September 1969): 188-191.
[35] Cynric Temple-Camp, *The Cause of Death* (Auckland: HarperCollins, 2017), pp. 22-31; and Timothy David Koelmeyer, *A Life in Two Lands* (Auckland: self-pub, 2017), p. 77.
[36] Simon Collins, 'Pathologists Warn of Risk of Dismantling National Forensic Pathology Service', Healthcentral.nz, August 20, 2018, https://healthcentral.nz/pathologists-warn-of-risk-of-dismantling-national-forensic-pathology-service/; see also e.g. Nikki MacDonald, 'Pathologist Warns of Work Overload', *Dominion Post*, January 10, 2004, A20, accessed October 19, 2019, http://search.ebscohost.com.ezproxy.christchurchcitylibraries.com/login.aspx?direct=true&db=azh&AN=TDP0401100202-GPATHO2-ED&site=ehost-live.
[37] Hughson and Ellis, *A History*, pp. 5, 23, 38-39.

early twentieth century also did not suggest that the reorganisation was due to scandals, and purely recounted the reorganisations of the Laboratory as policy decisions.[38]

However, towards the end of the twentieth century, controversies generated through the conviction of Arthur Allan Thomas (New Zealand, 1970) eventually led the National Research Advisory Council to review the Chemistry Division's forensic services in 1982. Thomas was falsely accused and convicted of murdering Harvey and Jeanette Crewe after the police officers who were investigating the crimes planted evidence against him. The Royal Commission Inquiry into the case in 1980 concluded that the prosecution's forensic scientist, Dr Nelson, 'showed a disturbing lack of neutrality by a scientific witness' and that his work in the prosecution's ballistic evidence contained 'a fundamental error of observation.'[39] Although the National Research Advisory Council recommended changes such as the establishment of a forensic liaison officer and a system for quality control, the recommendations were not discussed further in detail in the New Zealand parliament and no formal laws or regulations resulted immediately from the report.[40] No attention was drawn to Dr F. J. Cairns, the pathologist in this case, as there was no suggestion that he had acted inappropriately. It was 1992 when the Chemistry Division of the former Department of Scientific and Industrial Research was completely restructured as a part of the economic and public service reforms instituted by the New Zealand government at the time.[41] The recommendations of 1982 appears to have little relationship with the 1992 reforms given the passage of time and the nature of the changes that were instituted. Although some controversy in forensic science did inspire calls to review the state of forensic science services in New Zealand towards the end of the century, scandals arising from forensic medicine did not appear to play any important role in triggering reforms to New Zealand's forensic medicine and science during the mid-twentieth century. Where changes occurred, they were still mostly driven by expediency to suit the situation.

---

[38] Department of Scientific and Industrial Research Chemistry Division, *One Hundred Years of Chemical Research* (Wellington: Department of Scientific and Industrial Research, 1965), pp. 15-17; and Department of Scientific and Industrial Research Chemistry Division, *Current Projects and Organisation 1983*, H. V. Brewerton, comp. (N.p.: Department of Scientific and Industrial Research, 1983), pp. 99-100.

[39] Royal Commission of New Zealand, *Report of the Royal Commission to Inquire into the Circumstances and the Convictions of Arthur Allan Thomas for the Murders of David Harvey Crewe and Jeanette Lenore Crewe* (Wellington: P. D. Hasselberg, Government Printer, 1980), p. 96.

[40] See 453 Parl. Deb. (1983), pp. 3092-3093 (NZ), https://babel.hathitrust.org/cgi/pt?id=uc1.b3281404&view=1up&seq=668.

[41] Keith Bedford, 'Forensic Science Services', *New Zealand Law Journal,* no. 8 (September 2011): 285.

Impact of successes in forensic medicine

Given that scandals arising from forensic medicine and forensic science were downplayed in the media, the scandals' impact in changing forensic medicine or the way it was practised was limited. In fact, it could be said that successful cases attracted more attention, and the emulation of effective techniques from those cases improved forensic medicine. This is evident in the Ruxton case, where the unusual nature of the crime provided opportunity for medico-legists to pioneer new techniques in their attempts to link the dismembered bodies to the missing women from Ruxton's house. One technique in particular which was referred to in Chapter One was the superimposition of photographs on the skulls of the victims. This was where Glaister Jr. had life-size prints made from negatives of Mrs Ruxton's studio portrait and of what was known as 'Head No. 2', and superimposed one on top of the other. The result was a visually persuasive corroboration of the victim's identity.[42] The interest this case generated led Glaister Jr. to not only publish a case study where superimposition of the photograph on the skull was discussed in detail, he also gave lectures where he used the case as an example.[43] Superimposition of photographs became a memorable feature of the investigation, which is evident in book reviews of the *Ruxton Case* that remarked on the technique.[44] Writing retrospectively, Knight named the Ruxton case as a 'classic' which was talked about 'whenever pathologists or crime writers get together' and 'as far as pictorial illustrations are concerned, it may well be "top of the pops" as the Ruxton identity photographs appear in almost every forensic textbook.'[45] The superimposition technique was utilised by other medico-legists in later cases. For example, when a skeleton of a woman was discovered in an old lead mine in 1961, a police detective superimposed the photograph of the skull onto a photograph of Mamie Stewart, 'which shows remarkable similarity of bones and teeth position.'[46] The jury at the inquest eventually found that the skeleton belonged to Mamie Stewart.[47]

The impact of successful cases could also be seen in New Zealand, as the *New Zealand Herald* reported at the time that 'according to experts, the trial of William Alfred Bayly will go into the text

[42] Odell, *Medical Detectives,* p. 121.
[43] See for e.g. John Glaister Jr., Notes on Science and the Investigation of Crime, 1930s-1950s, GB 0248 GUA FM/6/1/18, JGP/UG.
[44] See for e.g. Review of *Medico-Legal Aspects of the Ruxton Case*, by John Glaister Jr. and James Couper Brash, *The Garda Review,* October 1937, GUA FM/5/4/1, RDFMS/UG.
[45] Bernard Knight, 'Blood in the Drains: the Ruxton Case', late 20th century, p. 1, GB 1239 454/4/13, BKP/UC.
[46] Report of Detective Inspector Williams Regarding Remains Found at Brandy Cove, Caswell, Glamorgan on 5 November 1961, p. 18, GB 1239 454/2/1, BKP/UC.
[47] Bernard Knight, 'Riddle of the Sands at Brandy Cove', *Doctor*, April 26, 1984, GB 1239 454/2/1, BKP/UC.

books as a record of the importance of tremendous trifles'.[48] The medico-legists were able to reconstruct a partial skull from bone fragments found around Bayly's property, and proved the hypothesis that a full-grown man was burnt in an oil drum overnight.[49] The circumstantial evidence ultimately confirmed Bayly's guilt. After the trial ended, there were newspaper articles praising the use of forensic medicine during the investigations and the trial.[50] The writer noted that while New Zealand did not have the same advances or demand seen in other countries, 'many cases in the last decade or so have brought forward evidence from expert witnesses, who have indicated conclusively the invaluable aid given by science toward… the administration of justice.' The writer went on to claim '[no] New Zealand case has demonstrated more impressively the importance of the "scientific detective" than the Bayly trial' and the scientific tests for bloodstains described by the experts 'must excite in the lay mind a profound respect for the capacity of scientists and similar experts…'[51] The admiring tone of this article was echoed in contemporary books about the Bayly trial. For example, H. J. Wilson began his edited volume of trial transcripts from the case by noting that 'the progress of science has tended in a remarkable manner to assist in bringing criminals to justice…'[52] Both prosecution experts and medico-legists advising the defence spoke of the trial in the highest terms years later. Professor E. F. D'Ath, an expert who advised Bayly's defence, said in the preface to P. P. Lynch's autobiography that the case 'marked the beginning of a new era in which justice called to its aid the rapidly developing sciences in their many branches', echoing P. P. Lynch's own remark later in the book that the case 'marked the beginning of detection's scientific age.' Although Lynch also discussed the Mareo case in his autobiography, it was not mentioned beyond one chapter in his book.[53] The controversy around forensic medicine that plagued the Mareo case would have made it less straightforward for Lynch's purposes to showcase the powers of forensic medicine. Successful cases like Bayly which generated uniformly positive publicity about forensic medicine, were more persuasive in ushering a change of attitude about the use of science in crime investigations in New Zealand.

The influence of the Ruxton and Bayly cases could be contrasted with reactions to the Truscott case in Canada after Truscott's conviction was upheld in the Supreme Court in light of polarised medical theories. As discussed in Chapter Two, the results of the Truscott case caused a conservative backlash against the public fury over the potential miscarriage of justice and the media coverage the

[48] 'Great Trifles'.
[49] Wilson, *The Bayly Case,* pp. 92, 97-98.
[50] See for e.g. 'Forensic Ballistics', *New Zealand Herald*, June 25, 1934, 14.
[51] 'Great Trifles'.
[52] Wilson, Prefatory Note to *The Bayly Case.*
[53] Lynch, *No Remedy,* pp. 11-12, 18, 115-126.

case received. Even though there were people who questioned the Supreme Court's verdict or were discomfited by it,[54] the divided opinions over the validity of the forensic medicine relied upon were not effective in prompting the government to take further action about the case. In contrast, highly successful cases where forensic medicine played a pivotal part in proving the guilt of the defendant had lasting impact on the practice of forensic medicine decades on. Other than in the Mamie Stewart case, references to the Ruxton case could also be found in the 1960 trial of Sarah Harvey. Similar issues around identification arose because the prosecution had to prove the mummified remains found in a cupboard of Harvey's home belonged to Harvey's boarder Frances Knight. Professor Ronald Harrison, a professor of anatomy at Liverpool University, said he used techniques from the Ruxton and Christie cases to establish identity of the victim.[55] Harrison's references to other famous cases gave credibility to his evidence because he was using methods employed by previous scientists which led to successful prosecution of the cases. Similarly, while Lynch and D'Ath might have sensationalised the importance of the Bayly trial, Hughson and Ellis had reported 'a wider use of science in criminal investigations' at the Dominion Laboratory from the mid-1930s, coinciding with the end of the Bayly case. In the late 1920s, the laboratory only dealt with about 10 samples submitted by the police from Wellington every year. Yet this number greatly increased by the mid-1930s, when 100 samples were received from the police in Wellington.[56] Thus, when compared to the controversy generated by the Mareo case, the Bayly case had a greater impact in altering the public and the police's attitudes towards science and encouraged incremental change in forensic science and medicine as demand increased.

Generalisation of shortcomings in forensic medicine

While the medico-legists were quick to claim credit in cases where forensic medicine played a pivotal part in securing convictions, this was not the case where the scientists made errors that prejudiced the cases. It was relatively rare for specific individuals to be mentioned in public commentaries in connection with mistakes in forensic medicine during the mid-twentieth century. More specific instances of medico-legists' professional incompetence only emerged later in the century. It was 1977 when Dr Alan Clift, a biologist who worked for the Home Office forensic laboratory, was suspended pending police investigations into his professional work. The *Times* only

[54] See for e.g. Duart Farquharson, 'Truscott Decision: Verdict on the Legal System?', *Ottawa Citizen*, May 9. 1967, 7.
[55] 'Ruxton Technique Helped to Prove Identity of Mummy', *Liverpool Echo and Evening Express,* July 2, 1960, 11.
[56] Hughson and Ellis, *A History,* pp. 58, 74.

reported this news a year later,[57] and the fallout from Clift's biased and erroneous scientific evidence was only reported in detail in 1981.[58] This means any impetus for reform was limited during the mid-twentieth century because the issues with forensic medicine were not demonstrated publicly and no particular case could be pinpointed to have triggered reforms. The impact of linking a case to controversial public issues could be seen in the debates about capital punishment in the mid-twentieth century, where the Truscott and Evans cases could be said to have contributed to the eventual abolition of the death penalty in Canada and Britain respectively. As discussed in Chapter Two, the Truscott and Evans cases were utilised by campaigners for the abolition of the death penalty to show the disastrous consequences of capital punishment. Even though the issues with the original scientific evidence from the prosecution were well-publicised, this did not result in reforms in forensic medicine because Truscott's conviction was confirmed and the questionable evidence was supported by other experts. These cases were very persuasive for the general public who followed the debates, as the campaigners demonstrated that the problems within the justice system were real and the defendants involved in those cases were shown to be ordinary people caught up in situations not necessarily of their own making.

This phenomenon was evident in Britain, Canada and New Zealand. Sher agrees with the historian Carolyn Strange's view that John Diefenbaker's government '[bowed] to public pressure' partially generated by Truscott's original conviction when Diefenbaker introduced legislation in 1961 to outlaw executions of juveniles under the age of eighteen. The publicity around the Truscott case after the publication of LeBourdais' book arguably led to further restrictions to the scope of crimes punishable by the death penalty, as it became reserved only for people who killed on-duty police and prison guards.[59] In Britain, the first steps to the abolition of the death penalty was taken in 1965 when it was suspended legislatively.[60] Although slightly exaggerated, a Canadian news report clearly held the Evans case responsible for setting off 'a movement in Britain that resulted in abolition of the death penalty'.[61] The same trend was also evident in New Zealand after the death penalty was restored in 1950.[62] The case of Walter Bolton (1957, New Zealand) caused widespread uneasiness.[63] Bolton was accused of poisoning his wife Beatrice with arsenic, but there was an innocent explanation for the presence of arsenic in her body because it was found their farm's drinking water

[57] 'Dr Alan Clift', *Times,* October 14, 1978, 4.
[58] See e.g. 'MP Wants Inquiry into Pathologist's Evidence', *Times,* June 20, 1981, 2.
[59] Sher, *Until You Are Dead*, pp. 339, 370-371.
[60] Murder (Abolition of Death Penalty) Act, 1965 (Eng.).
[61] 'Evans Probably Was Killer, Judge Reports: Hanged for Wrong Murder', *Leader Post,* October 12, 1966, 1.
[62] 'The Death Penalty'.
[63] See for e.g. Alex Fensome, 'What Do You Say to a Condemned Man?', *Dominion Post*, February 16, 2013, A18.

had been contaminated by sheep dip.[64] The Labour government suspended capital punishment again in 1957, and the death penalty was formally abolished except for treason in 1961.[65] The Bolton case was referenced in the parliamentary debates in 1961. A Labour Member of the Parliament, Frederick Hackett, referred to '[the] last person to be hanged in New Zealand' and said '[the] Government of the day, or possibly the Minister of Justice, orphaned the children of a family by hanging a man, and it is very doubtful today whether he was guilty of the crime.'[66] It is clear that individual cases had effected change by illustrating the cruelties of particular policies. However, these kinds of rhetoric were not used to drive reforms in the field of forensic medicine during this time period.

Instead, medico-legists commonly expressed problems in forensic medicine in vague and general terms. As discussed in Chapter Two, it is not unusual for medico-legists to express opposing scientific theories based on the same facts in an adversarial system. But these inconsistencies in scientific theories are acceptable as long as the scientists honestly hold those views and are able to support their theories with evidence. However, mistakes are different. Medico-legists generally avoided assigning responsibility for errors to any particular individual, or giving any details about the mistakes that were made. This means medico-legists could make generalisations about the problems to minimise them, and there was no 'face' to the problems which might incite public debates. For example, Knight acknowledges that the division between full-time pathologists who specialised in investigating suspicious deaths, and part-time pathologists who mainly worked at the hospital and only conducted autopsies for the Police where necessary, 'has given rise to some unease and occasional embarrassment'. Knight hastens to assure the reader that this 'must not be taken to mean any significant difference in medico-legal competence'. He goes on to say he knows some hospital pathologists to be among 'some of the most penetrating and expert forensic minds'.[67] While Knight implies that there has been some cases of incompetency with some pathologists, his refusal to give more details has lessened the negative effects of mistakes made by those other experts.

The same kind of rhetoric could be seen among New Zealand pathologists. Under the Coroner's Act 1951, the coroner had the authority to order any registered medical practitioner to carry out an autopsy. But in a *New Zealand Medical Journal* article, Cairns openly criticised the pathologists and

[64] 'Defence Evidence in Bolton Murder Trial', *Press*, December 6, 1956, 16.
[65] 'The Death Penalty'.
[66] 328 Parl. Deb. (1961), p. 2769 (NZ), https://babel.hathitrust.org/cgi/pt?id=uc1.32106019841847&view=1up&seq=765.
[67] Knight, *Murder, Suicide or Accident* draft, pp. 10-11.

the medical profession for 'showing a poor knowledge of their obligations under [the Act].' He then distinguished pathologists from other registered medical practitioners, noting that 'it is unreasonable to ask a person not trained in pathology to try to determine the cause of some unexpected deaths.'[68] In saying this, Knight and Cairns did not accuse anyone of incompetence, while elevating their knowledge as being specialised since not every doctor could conduct autopsies. Canadian medico-legists took a similarly evasive approach when they addressed criticisms about the lack of qualified forensic pathologists in Canada. In 1971, Wishart was criticised in the Canadian parliament because the Centre of Forensic Sciences, one of the major Canadian laboratories, had no pathologist attached to it. While Douglas Lucas, the Centre's director, seemed to agree this was an issue, his response was that pathologists were 'very rare birds. There are perhaps three in Canada. There are fewer than 30 in the United States. Perhaps a dozen in the United Kingdom.' He characterised the issue as 'a matter of competition.'[69] His response gave no further insight into reasons why there was a paucity of pathologists and what could be done to hire a pathologist for the laboratory. Even though the Chairmen of Canadian Department of Pathology described the lack of a good academic centre for forensic pathology as '[reflecting] most adversely on the quality of forensic pathology practised in Canada, on the quality of advice available to the courts',[70] issues in forensic medicine could be dismissed quite easily as there were no mentions of any specific individuals or particular cases which suffered because of the lack of a pathologist during the mid-twentieth century. As medico-legists downplayed and generalised problems within forensic medicine, they provided the government with very little impetus to call for reforms.

Administrative nature of the problems in forensic medicine

When medico-legists acknowledged there were problems in forensic medicine, these problems were identified as policy issues. This is evident when medico-legists portrayed some mistakes as performance issues, such as untrained individuals undertaking work in forensic medicine, which was caused by administrative inadequacies within the discipline. This protected the image of forensic medicine's reliability and competent individuals' reputation. Rather than an overhaul of the forensic field, the proposed reforms were relatively minor and administrative in nature because the dominant argument was that the system was broken. For example, medico-legists bemoaned that unsatisfactory education or training caused mistakes in forensic medicine in mid-twentieth century

[68] F. J. Cairns, 'The Pathologist and the Coroner', *New Zealand Medical Journal* 64, no. 393 (May 1965): 252-253.
[69] 'Crime Data Centre Claims Success against "the Mob"', *Winnipeg Tribune*, January 21, 1971, 22.
[70] Ritchie, 'Educational, Research and Training', p. 6649.

Britain. In 1962, the *Times* noted 'the comparative neglect of forensic medicine in the medical curriculum. Outside Scotland [forensic medicine] has never been looked upon as an academic discipline and all too often the subject has been dismissed in rather a cursory manner.'[71] The writer then reassured the readers that this problem was being resolved by the establishment of the British Academy of Forensic Sciences and the creation of a Diploma in Medical Jurisprudence, which would ensure there would continue to be properly qualified medico-legal experts whose evidence the courts could rely on.[72] This reform echoed Polson's suggestion for a National Forensic Medicine Service, modelled after the Continental institutions.[73] The article concluded on a positive note that it '[looked] as if at long last this neglected branch of law and medicine is coming into its own.'[74] The same idea was seen in New Zealand when a new medical school was established in Auckland. The new professor of pathology at this medical school alluded to 'a variety of reasons for the relative paucity of first-class recruits to pathology in New Zealand'. In his view, the establishment of a new medical school and a new curriculum in forensic medicine would help fix this issue by producing well-qualified graduates in the field.[75] While similar discourses were seen in the Canadian context during the mid-twentieth century, as discussed above, reforms to the training of forensic pathologists were not instituted until the twenty-first century. It is likely that the government did not view education in forensic medicine as a pressing issue requiring reform, given relatively few forensic pathologists were trained in Canada during the mid-twentieth century. As many medico-legists reasoned that mistakes could be reduced or eliminated by better training systems for future medico-legists, the focus was on improving training systems rather than conducting further investigations into the soundness of forensic medicine or assess contemporary practices in the field. This means that, while mistakes were acknowledged to some extent, the way problems were identified simultaneously shifted the responsibility off the individuals who were still working within the system and provided an excuse for poor performance by some. They were also able to present a simple solution which would reassure the public or policy makers that the issues were being resolved. Therefore, although certain administrative issues in forensic medicine led to some measure of reform, public faith in the usefulness of forensic medicine was unshaken.

Medico-legists also portrayed inadequate staffing as a cause of issues in forensic medicine. This means the police had to involve practitioners who were not qualified in the field of forensic

[71] 'Doctors at Law', *Times*, June 30, 1962, 9.
[72] Ibid.
[73] 'Verdict on Coroners: Outmoded'.
[74] 'Doctors at Law'.
[75] Herdson, 'The Place of Pathology', 190.

medicine as a last resort, and mistakes could have been made due to inexperience. The lack of trained forensic scientists also means laboratories were under tremendous pressure to meet the demands of the police, which might have resulted in blunders. This allowed medico-legists to portray human error as the main reason for oversights in forensic medicine. In 1963 Britain, Polson reported that the majority of the coroner's post-mortem examinations were left to unskilled people.[76] This situation had not changed by the late 1960s and early 1970s, when Knight estimated that there were only around sixteen full-time forensic pathologists in England and Wales to cover the medico-legal pathological needs of approximately forty million people. He agreed that hospital pathologists carried out around eighty percent of coroner's post-mortem examinations.[77] Knight further noted that forensic medicine had declined 'markedly' because there were no established chairs of forensic medicine in England and Wales and examination in the subject was only held in Leeds in those parts of Britain. The lack of new forensic pathologists meant their numbers were dropping very quickly as older experts reached retirement age. The police had to rely on hospital pathologists who did not necessarily have experience with investigation of murders.[78] Nickolls, who was the director of the Metropolitan Police Laboratory during the mid-twentieth century, also saw staffing as the fundamental issue. He opined that the laboratories did not have the staff to address all the demands, 'let alone all the cases that probably should be examined.'[79] This allowed medico-legists to elicit sympathy for the inadequate situation they were in as a way to encourage reform, rather than relying on the negative publicity of scandals. This was preferable to the medico-legists who would have wished to protect the reputation of forensic medicine. When they acknowledged oversights, they could characterise them as unfortunate but understandable mistakes where nobody should be blamed. This attitude was seen in Chapter Two's discussion where Simpson excused Penistan's oversight around evidence as unsurprising given the conditions Penistan was working in.[80] Camps did not appear to have specifically criticised the prosecution for losing part of the evidence at all. Under cross-examination, he agreed that Penistan had to work under 'most appalling conditions' during the post-mortem examination.[81] It seems Camps and Simpson both attempted to strike a balance between not emphasising potential scandals that would compromise the reputation of forensic medicine, and backing their own professional opinions in the inevitable clash that occurs in the adversarial court system.

[76] 'Cause of Death', *Times,* April 17, 1963, 11.
[77] Knight, *Murder, Suicide or Accident* draft, p. 6.
[78] Knight, 'Cash the Answer'.
[79] 'Cause of Death'.
[80] Simpson, 'Steven Truscott', 65.
[81] 'Truscott Case: British Expert Supports Crown'.

Similar trends were evident in Canada and New Zealand, which demonstrated that the difficulty around staff retention was a universal and longstanding issue in forensic medicine which required reforms, rather than an issue exposed by individual scandals. As discussed above, Canada had a shortage of forensic pathologists. They also had issues with employing forensic scientists. In 1971, Lucas acknowledged that the laboratory was '[slow] with reports for police and other law enforcement agencies, lacking a head of pathology and sufficient staff'.[82] The laboratory was criticised to have become 'third-rate'.[83] It is also possible to attribute problems in New Zealand's forensic work to staffing difficulties in laboratories. The Chemistry Division of the Department of Scientific and Industrial Research had trouble retaining senior staff during the 1950s. Although Hughson and Ellis did not refer to mistakes made during this time as a result of the pressures on the available resources, they agreed that the 'high turnover of staff (over 10% per annum) was a severe drain on supervising staff and on management resources.' Hughson and Ellis implied that the shortage of staff was caused by poor salaries and the competitive international market.[84] It is likely the Chemistry Division faced a similar situation to that described by M. Jeanette Grey from the pathology department in New Plymouth Hospital in 1963. She stated that 'ever-changing staff' affected the standard of work carried out in the laboratory.[85] Again, there were no closer assessments of forensic medicine because the issues raised by medico-legists did not compromise the integrity of forensic medicine itself when laboratories were adequately staffed and post-mortems were conducted by properly qualified personnel. Given the widespread concerns across three different British Commonwealth countries, the discussions appear to be part of the ongoing and routine advocacy by all medico-legists for reform, rather than being triggered by a major scandal. The issues were more administrative in nature and they were shown to be capable of straightforward resolution. There was also no mention of specific cases at all when the existence of mistakes was acknowledged.

Focus on the detection of crime and the prosecution of criminals

The rhetoric praising the powers of scientific policing, which was likely intended to instil public confidence in the crime investigation and justice systems to combat crime, overshadowed discussions about problems in forensic medicine and science and minimised the cause for further

[82] 'Crime Data Centre Claims Success'.
[83] Ibid.
[84] Hughson and Ellis, *A History,* pp. 124-125.
[85] M. Jeanette Grey, 'The Last Twelve Years', *New Zealand Journal of Medical Laboratory Technology* 11, no. 17 (October 1963): 99.

reforms in the area. As explained in Chapter One, medico-legists linked forensic medicine closely with crime investigations and the justice system. There were discussions about rising crime rates in Britain, Canada and New Zealand which caused public concern during the twentieth century.[86] This is seen in sensationalised headlines such as 'Police Not Winning "Near War of Crime"' and 'Rising Crime in London'.[87] For the most part, forensic medicine and science were portrayed to be the solution to rising crime rates, especially as criminals also found new ways to evade detection or capture using advances in science and technology. In 1966 Britain, Knight declared that the Forensic Science Service was a 'vitally important part of the fight against rising crime figures'.[88] Even though he agreed that '[the] pressure of work and court attendances… has always been so great that time was too short for much organised research into developing new methods to keep one step ahead of the criminal', he still boldly stated 'the British forensic scientist has an international reputation, even though deprived so far of the more lavish facilities of his foreign colleagues.'[89] The same sentiment is seen in Canada through the headline of Francis' article 'Science's Hidden War on Crime', which was about the work of forensic laboratories and medico-legists in procuring evidence that 'convicted the guilty and saved the innocent'.[90] Forensic medicine was similarly posited as the answer to criminal activity in New Zealand. Dr E. F. D'Ath, a professor of pathology at the Dunedin Medical School, said in a 1940 talk 'since the law had enlisted the aid of science, the life of the criminal had become a very hard one… for the facilities made available by science had been of inestimable assistance to the police in their investigation of crimes that might never have been solved by ordinary methods.'[91] Even when issues in forensic medicine were raised from time to time, these discussions were unable to fully dispel the dominating image of forensic medicine as the ultimate solution to problems of crime.

The focus on proper prosecution of criminals helped drive change in forensic medicine as police officers became more dependent on forensic medicine and science. As discussed above, forensic laboratories grew incrementally through necessity, and the growing utilisation of science in policing throughout the mid-twentieth century contributed to the laboratory's workload. For example, in 1966 Ontario, Canada, Wishart changed the name of the Attorney-General's Laboratory to the Centre of Forensic Sciences, and acknowledged that the laboratory was exceeding its intended

---

[86] See for e.g. Lyn Rayner, 'The Police and You', *Newmarket Era*, May 10, 1967, 4; 'The Police Force', *Otago Daily Times*, November 21, 1945, 6.
[87] 'Police Not Winning "Near War of Crime"', *Times,* May 26, 1966, 14; 'Rising Crime in London', *Times*, July 22, 1966, 12.
[88] 'The Scientists Who Help to Fight the Crime Battle'.
[89] Ibid.
[90] Francis, 'Science's Hidden War', 25.
[91] 'Detection of Crime', *Otago Daily Times*, February 14, 1940, 4.

function due to the expanded work.[92] In a 1986 brochure produced by New Zealand's Department of Scientific and Industrial Research about the Chemistry Division, it noted specifically '[law] enforcement has turned increasingly to science for assistance in the battle against crime, and the forensic scientists have responded to this demand by introducing increasingly sophisticated techniques into the laboratory.'[93] This supported the gradual expansion of experiments in forensic science from toxicology to serology and others between the early- and mid-twentieth century described by Hughson and Ellis.[94] However, the actual consolidation of the link between science and justice brought about by scientific policing arguably gave forensic medicine and science authority that was more difficult to challenge. This affirmation that science was the arbiter of truth shifted the focus away from possible miscarriages of justice caused by forensic medicine. This also meant mistakes in forensic medicine largely relied on the medico-legists' acknowledgment to be discovered and remedied, and they were unlikely to be challenged by others to accept reforms. Therefore, while public fears about crime rates further encouraged the use of forensic medicine and science and drove gradual changes to those fields, the resulting reliance on forensic medicine by the police and the public also overshadowed any disquiet about the integrity of the forensic medicine the police relied on, and prevented extensive reforms.

Nevertheless, British medico-legists participated in the discussion of rising crime rates by framing issues in forensic medicine in the same way to the public, which ultimately led to some minor reforms to forensic medicine and science as part of police reforms. Medico-legists not only measured the successes of forensic medicine with the court's approval of their expert evidence, they also used statistics for the apprehension of criminals or the detection of crime as an indicator of forensic medicine's effectiveness. As they argued that inadequacies in medico-legists' work were letting criminals literally get away with murder, this analysis of a public concern brought more popular attention to the field of forensic medicine. At the same time, this argument also lessened the problematic aspects of forensic medicine because they were discussed in the wider context of failings by several organisations which led to the rise in crime. This is evident in Britain, where Polson openly stated in an international conference of forensic sciences in London in 1963 that many murders were undetected because the so-called experts did not examine the bodies properly.[95] Camps echoed Polson's concerns years later when he opined that 'due to the rapid decline both in

[92] 'Wishart Sees More Use of Science by Police'.
[93] Department of Scientific and Industrial Research Chemistry Division, *Forensic Science in DSIR* (Wellington: Department of Scientific and Industrial Research, 1986).
[94] Hughson and Ellis, *A History*, pp. 58, 75.
[95] '"Perfect Murders" that Fool Doctors', *Daily Mail,* April 17, 1963, 18.

the number of trained medico-legal pathologists and in the standard of forensic medicine among doctors generally, there is a significant number of undetected homicides and unrecognised accidental and suicidal deaths.'[96] Neither expert provided an exact figure for undetected crime, or alluded to prominent cases where this had occurred. However, the participation of medico-legists in discussing the scandal of criminals going unpunished arguably motivated limited change in forensic medicine. The perception of rising crime rates led Roy Jenkins, the British Home Secretary, to advocate for reforms to the police force. Therefore at the same time, Jenkins also encouraged more research to be done in the fields of serology, glass and explosives, so scientists would be better able to help detect crime.[97] The Home Office also announced that they would set up a new laboratory to take the overflow work from the Scotland Yard laboratory, convene a new Scientific Advisory Council to bring together forensic scientists with other disciplines, and create a committee to look into the needs of the forensic pathologists.[98] It is clear by this stage that the police accepted forensic medicine's contribution was important in solving crimes, as Jenkins announced the establishment of the Scientific Advisory Council while 'addressing a City of London Police Committee luncheon attended by senior officers from many parts of Britain'.[99] While there was no specific scandal in forensic medicine from a particular case, the medico-legists' framing of forensic medicine's inadequacies within the discourses about rising crime rates arguably brought about limited change that affected the forensic science services.

Conclusion

Scandals in forensic medicine provided limited impetus for reforms in forensic medicine during the mid-twentieth century. The majority of the changes in the field of forensic medicine and sciences could be characterised as incremental. In Britain, changes to the medico-legists' profession remained largely ad hoc. Similar trends were seen in Canada and New Zealand, where changes seemed to be driven by expediency around the crime investigation systems rather than scandals in forensic medicine. The cases where forensic medicine was successful in solving the crimes and proving the guilt of the defendants had more impact on future practice of the medico-legist. On the other hand, cases where forensic medicine caused controversies did not cause widespread reforms. Instead, problematic cases in forensic medicine were generalised. The medico-legists' reluctance to attribute responsibility for mistakes to particular individuals helped downplay problems in forensic medicine.

---

[96] Knight, 'Cash the Answer'.
[97] 'Britain Pits Science against Crime Wave', *Province*, February 3, 1966, 3.
[98] 'The Scientists Who Help to Fight the Crime Battle'.
[99] 'Ten Scientists to Advise in Fighting Crime', *Times*, January 7, 1966, 10.

Unlike the debates around the abolition of capital punishment, the issues in forensic medicine lacked a public 'face' which would have demonstrated the extent of the problem to the public during the mid-twentieth century. Medico-legists from all three British Commonwealth countries also tended to portray errors in forensic medicine as administrative issues such as inadequacies in training or staff shortages, which led to limited reforms rather than an independent review of the forensic medicine field. While British medico-legists achieved some measure of reform for the discipline by framing issues in forensic medicine as a contributor to higher crime rates, discussions about increased crime rates overshadowed problems in forensic medicine because it was widely seen as the solution. This chapter has canvassed the common causes behind any progress that was made in forensic medicine and forensic science within the British Commonwealth, which had not been examined in depth before in current secondary literature. It has shown that forensic medicine ironically became a victim of its own successful image as much-needed reforms remained minimal and neglected by the governments across Britain, Canada and New Zealand through the mid-twentieth century.

Conclusion

The enigmatic image of the impartial medico-legists from the British Commonwealth and the almost mythical powers of forensic medicine dominated media portrayals of crime during the mid-twentieth century. Chapter One demonstrated that the British, Canadian and New Zealand medico-legists' place in the crime investigation processes and within the justice system allowed them to strengthen the connection between their work and the delivery of justice. This thesis went beyond existing analyses of pathologists' images by including discussions of how New Zealand and Canadian medico-legists presented themselves and their work. Pathologists not only developed their distinctive media personae, they also enhanced their own reputation and portrayed their work in the most positive way through fictional and non-fictional publications. Through journal articles, case studies, autobiographies, and fictional works, the pathologists were able to shape their own individual legacies and construct the reputation of forensic medicine. Through an examination of the medico-legists' written work, it is clear they shared the common purpose of presenting pathologists and forensic medicine as essential tools in crime investigations in order for justice to prevail.

These confident images created by medico-legists were tested through potential scandals in forensic medicine posed by the Evans, Truscott and Mareo cases. The unique comparison of these cases demonstrates that despite the differences of the jurisdictions, some common trends are evident in the way medico-legists shielded their colleagues from criticism by presenting a united front. Chapter Two gave a different perspective to the official inquiry transcripts from the Evans case by focusing on the exchanges between the pathologists regarding the potential error of not taking vaginal swabs and how they responded to the oversight. Helpern's and Simpson's biased accounts of the Truscott case further confirmed the collaboration between the experts to bolster their Canadian colleague's controversial medical theory. By examining P. P. Lynch's autobiographical account of the Mareo case, this thesis demonstrated use of the same tactic in New Zealand. This chapter also established the effectiveness of the medico-legists' efforts in preserving the reputation of forensic medicine by assessing the public response through newspaper editorials and letters to the editor. As these conflicts were normalised within the adversarial system and more pressing debates emerged, potential scandals in forensic medicine did not garner attention in the media, and the reputation of the medico-legists and forensic medicine remained largely intact in the mid-twentieth century.

Contrary to Cole's claim that scandals spurred change in modern forensic sciences,[1] Chapter Three showed that reforms in forensic medicine and forensic science occurred gradually against the backdrop of forensic medicine's unassailable image. It examined reasons behind the lack of comprehensive reforms in the field across the Commonwealth, as scandals in forensic medicine provided very little impetus for change. These discussions illustrated how a sense of complacency about the adequacy and reliability of forensic medicine and its practitioners was cultivated through most of the twentieth century. By examining Cole's claim in the context of the mid-twentieth century, this thesis contributed to the history of forensic medicine by considering the issue of governmental reforms for the forensic science services during this time. Historically, improvements to forensic medicine or forensic sciences were usually not in the government's priorities, and this held true for three different governments within the Commonwealth. However, this study shows there is potential for closer examinations of the late 1970s scandals involving Dr Clift in Britain and the wrongful conviction of Arthur Allan Thomas in New Zealand, and the impact each controversy had on the governmental stance about the adequacy of forensic science services in their respective countries shortly before the advent of DNA profiling. The contribution this thesis made is particularly relevant today because the 2019 House of Lord's report regarding the perilous state of forensic science services in Britain has not been the only document that bemoaned the unsatisfactory status quo. The 2013 Canadian report by Bowes, Milroy and Pollanen and various New Zealand news articles about their forensic services have all illustrated that the forensic crisis has become international.[2] For the situation to be remedied, this study showed it is important to recognise that the forensic sciences and forensic medicine's impartial and successful illusion is only a goal to aspire to rather than an accurate representation to be taken for granted.

[1] Cole, 'Forensic Science and Wrongful Convictions', 714.
[2] M. Pollanen, M. Bowes, S. VanLaerhoven, *Forensic Science in Canada: A Report of Multidisciplinary Discussion*; 'Government Needs to Stop Break-up of Forensic Pathology', Scoop Health, August 22, 2018, https://www.scoop.co.nz/stories/GE1808/S00054/government-needs-to-stop-break-up-of-forensic-pathology.htm.

Bibliography

Unpublished Primary Sources

Archives

Cabinet Papers (CAB 143), National Archives.

Home Office Papers (HO 299/18, HO 45/25653-25658, 25662), National Archives.

Metropolitan Police Papers (MEPO 2/9617), National Archives.

Papers of Professor Bernard Knight (GB 1239 454), University of Cardiff.

Papers of Professors John Glaister Sr. and John Glaister Jr. (GB 0248 DC 403), University of Glasgow.

Records of the Department of Forensic Medicine and Science (GB 0248 GUA FM), University of Glasgow.

Published Primary Sources

Audio-visual clips:

Proudfoot, David Sullivan. dir. *The Expert.* Season 4, episode 2, 'Blood Line'. Aired October 1, 1976. https://www.youtube.com/watch?v=ic-f6P735QE.

Sher, Julian. prod. *The Fifth Estate*. Episode 2000. 'Steven Truscott- His Word Against History'. Aired March 29, 2000, on CBC News. https://www.cbc.ca/fifth/episodes/40-years-of-the-fifth-estate/steven-truscott-his-word-against-history.

Books and autobiographies:

Camps, Francis E. *Medical and Scientific Investigations in the Christie Case*. London: Medical Publications Ltd, 1953.

———. *Camps on Crime*. Devon: David and Charles, 1973.

Department of Scientific and Industrial Research Chemistry Division. *One Hundred Years of Chemical Research*. Wellington: New Zealand Department of Scientific and Industrial Research, 1965.

Freeman, R. Austin. *The Red Thumbmark*. London, 1907. Project Gutenberg Australia, 2014. http://gutenberg.net.au/ebooks/c00002.html.

———. *Mr Polton Explains*. London, 1940. Project Gutenberg Australia, 2014. http://gutenberg.net.au/ebooks05/0500371h.html.

Glaister, John Jr. *Final Diagnosis*. London: Hutchinson, 1964.

Glaister, John Jr., and James Couper Brash. *Medico-Legal Aspects of the Ruxton Case*. Edinburgh: E and S Livingstone, 1937.

Harcourt, Melville [Criticus, pseud.]. *I Appeal*. Auckland: Oswald-Sealy, 1945.

Kennedy, Ludovic. *Ten Rillington Place*. London: Victor Gollancz Ltd, 1961.

Knight, Bernard. *The Thread of Evidence*. Abercynon: Accent Press, 2015. iBooks.

Koelmeyer, Timothy David. *A Life in Two Lands*. Auckland: Self-published, 2017.

Leary, L. P. *Not Entirely Legal*. Christchurch: Whitcoulls, 1977.

LeBourdais, Isabel. *The Trial of Steven Truscott*. London: Victor Gollancz Ltd, 1966.

Lucas, Douglas M. *A Life of Crime: My Career in Forensic Science*. Boca Raton, FL: CRC Press, 2019. https://books.google.co.nz/books?id=RVlxDwAAQBAJ&printsec=frontcover&dq=forensic+science+canada+history&hl=en&sa=X&ved=0ahUKEwj148bA76HjAhUEfSsKHWcsBvwQ6AEIRTAF#v=onepage&q=forensic science canada history&f=false.

Lynch, P. P. *No Remedy for Death*. London: John Long, 1970.

MacDonald, Anne-Marie. *The Way The Crow Flies*. New York: HarperCollins, 2003.

Millar, J. Halket. *The Bayly Murder Case*. Christchurch: Gordon and Gotch Ltd, 1934.

Shepherd, Richard. *Unnatural Causes*. London: Michael Joseph, 2018.

Simpson, Keith. *Forty Years of Murder*. London: HarperCollins, 1978.

——— [Guy Bailey, pseud.]. *The Fatal Chance: Twelve Cases from the Notebook of a Crime Pathologist*. London: Peter Davies, 1969.

Smith, G. M. *Notes from a Backblock Hospital*. Christchurch: Caxton, 1938.

Smith, Sydney. *Mostly Murder*. New York: David McKay Company, 1959. https://heinonline-org.ezproxy.canterbury.ac.nz/HOL/Page?collection=beal&handle=hein.beal/mosmurer0001&id=5&men_tab=srchresults.

Temple-Camp, Cynric. *The Cause of Death*. Auckland: HarperCollins, 2017.

Book chapters:

Camps, Francis E. 'Wounds of the Head and Body and Their Interpretation'. In *Legal Medicine*, edited by R. B. H. Gradwhol, 220–59. St Louis: The C. V. Mosby Company, 1954.

Journal articles and book reviews:

Algie, R. M. 'The Government's View of Science'. *New Zealand Science Review* 10, no. 9 (1952): 146–48.

Anonymous. Review of *Medico-Legal Aspects of the Ruxton Case*, by John Glaister Jr and James Couper Brash. *Juridical Review* 49, no 4 (1937): 449–50.

———. Review of *Medico-Legal Aspects of the Ruxton Case*, by John Glaister Jr and James Couper Brash. *Medico-Legal and Criminological Review* 5, no. 4 (October 1937): 451.

———. Review of *Textbook of Medical Bacteriology,* by R. W. Fairbrother. *Medico-Legal and Criminological Review* 5, no. 4 (October 1937): 451-52.

———. Review of *Medico-Legal Aspects of the Ruxton Case*, by John Glaister Jr and James Couper Brash. *Scottish Law Review and Reports of Cases* 54, no. 637 (1938): 18–21.

———. 'Notes Concerning the Problem of Holding and Recruiting Scientific Staff in New Zealand'. *New Zealand Science Review* 17, no. 2 (1959): 42–44.

———. ‘Editorial’. *Medicine, Science and the Law* 1, no. 1 (October 1960): 1–6.

———. ‘Medical Reports in Accident Cases’. *New Zealand Medical Journal* 64, no. 219 (April 1965): 217–18.

———. ‘A Review Body for Medical Service’. *New Zealand Medical Journal* 65, no. 404 (April 1966): 215–16.

———. ‘Commentary’. *Police Journal* 40, no. 9 (September 1967): 393–98.

B., H. J. ‘William Boyd : New Dimension to Pathology’. *Canadian Medical Association Journal* 120, no. 12 (June 1979): 1547.

Barber, Patricia. “Doctors Were Enthralled by Forensic Lectures.” *New Zealand Nursing Journal* 64, no. 5 (May 1971): 14–15.

Berry, D. C., and A. C. Hunt. ‘Identification by Dental Characteristics’. *Medicine, Science and the Law* 7, no. 2 (April 1967): 67–69.

Cairns, F. J. ‘Carbon Tetrachloride Poisoning’. *New Zealand Medical Journal* 45, no. 247 (June 1946): 176–78.

———. ‘The Pathologist and the Coroner’. *New Zealand Medical Journal* 64, no. 393 (May 1965): 252–54.

Camps, Francis E. ‘The Colchester Taxi Cab Murder’. *Medico-Legal Journal* 17, no. 1 (1949): 2–14.

———. ‘Carbon Monoxide Poisoning’. *Medico-Legal Journal* 18, no. 3 (1950): 75–97.

———. ‘The Case of Emmett Dunne’. *Medico-Legal Journal* 27, no. 4 (1959): 156–61.

———. ‘The Investigation and Interpretation of Head Injuries’. *Insurance Counsel Journal* 27, no. 1 (January 1960): 178–83.

———. ‘The Defence’. *Medicine, Science and the Law* 2, no. 1 (October 1961): 48–52.

———. ‘The Investigation and Interpretation of Head Injuries’. *Tort and Medical Yearbook* 2, no. 4 (1962): A52-A63. https://doi.org/10.1080/00325481.1959.11712656.

———. ‘The Medico-Legal Expert’. *Medicine, Science and the Law* 8, no. 1 (January 1968): 11–14.

———. ‘The Current State of Forensic Medicine in Great Britain’. *Case Western Reserve Journal of International Law* 2, no. 14 (1969): 16–18.

———. ‘The Doctor and the Courts’. *Cambrian Law Review* 1 (1970): 57–60.

———. ‘Science and Criminal Investigation’. *Police Journal* 45, no. 2 (April 1972): 104–7.

Caughey, J. E. ‘Medicine in a Changing World’. *New Zealand Medical Journal* 62, no. 372 (August 1963): 355–56.

Chubb, W. F. ‘Careers in Science and Technology’. *New Zealand Science Review* 23, no. 4 (1965): 57.

Cimon, Denis, Brigitte Desharnais, and Catherine Dicaire. ‘One Hundred Years of Forensic Sciences in Quebec: The Evolution of Scientific Techniques since 1914’. *Journal of the Canadian Society of Forensic Science* 47, no. 3-4 (2014): 148–69. https://doi.org/10.1080/00085030.2014.930227.

Clark, D. H., and Marion Law. ‘Post-Mortem Pink Teeth’. *Medicine, Science and the Law* 24, no. 2 (April 1984): 130–34. https://doi.org/10.1177/002580248402400214.

De Saram, G. S. W., G. Webster, and N. Kathirgamatamby. ‘Post-Mortem Temperature and the Time

of Death'. *Journal of Criminal Law, Criminology and Police Science* 46, no. 4 (1955-1956): 562–77.

Dick, I. D. 'The Public Attitude towards Science'. *New Zealand Science Review* 11, no. 11 (1953): 156–61.

Eiby, G. A. 'Writing in New Zealand: The Scientists'. *Post-Primary School Bulletin* 14, no. 3 (1961): 1–32.

Falla, R. A. 'The Responsibiity of Scientists to the Public'. *New Zealand Science Review* 11, no. 10 (1953): 141–42.

Fearnhead, R. W. 'Facilities for Forensic Odontology'. *Medicine, Science and the Law* 1, no. 3 (April 1961): 273–77.

Fisher, J. H. 'Obtaining and Presenting Evidence in Sex Cases'. *Criminal Law Quarterly* 4, no. 2 (August 1961): 150–59.

Gibbs, J. G. 'The Impact of Science in New Zealand Demands a New Policy Now'. *New Zealand Science Review* 21, no. 4 (1963): 80–81.

Glaister, John Jr. 'The Christie Case'. Review of *Medical and Scientific Investigations in the Christie Case,* by Francis E. Camps. *British Medical Journal* 1, no. 4864 (March 1954): 745.

Goodchild, Norman W. 'The Principles of Police Action'. *Police Journal* 31, no. 3 (July- September 1958): 174–81.

Gordon, F. A. 'Coincidence'. *Police Journal* 39, no. 11 (November 1966): 575–84.

Grey, M. Jeannette. 'The Last Twelve Years'. *New Zealand Journal of Medical Laboratory Technology* 11, no. 17 (October 1963): 97-102.

Haines, Edson L. 'Courts and Doctors'. *Canadian Bar Review* 30, no. 5 (May 1952): 483–97.

Hardie-Boys, R. 'The Expert Witness'. *New Zealand Medical Journal* 67, no. 431 (April 1968): 459–64.

Hatherill, G. H. 'Criminal Law Enforcement in England'. *University of Kansas City Law Review* 31, no. 1 (Winter 1963): 102–77.

Henderson, N. V. 'Some Impressions of the Conference'. *New Zealand Law Journal* 30, no. 9 (May 1954): 167.

Herdson, P. B. 'The Place of Pathology in the New Medical School in Auckland'. *New Zealand Medical Journal* 70, no. 448 (September 1969): 188–91.

Hodson, J .J. 'Forensic Odontology and Its Role in the Problems of the Police and Forensic Pathologist'. *Medicine, Science and the Law* 10, no. 4 (October 1970): 247–51.

Holden, H. S. 'The Functions of the Forensic Science Laboratory in Criminal Investigations'. *Medico-Legal Journal* 20, no. 1 (1952): 2–10.

Huber, R. A. 'Expert Witnesses- in Defence of Expert Witnesses in General and of Document Examiners in Particular'. *Criminal Law Quarterly* 2, no. 3 (November 1959): 276–95.

Hughes, Graham. 'Criminal Responsibility'. Review of *An Inquiry into Criminal Guilt,* by Peter Brett. *Stanford Law Review* 16, no. 2 (March 1964): 470.

Humphreys, Travers. 'Doctors and the Law'. *Medico-Legal Journal* 18, no. 4 (1950): 122–30.

Larson, Charles P. Review of *Practical Forensic Medicine,* by Francis E. Camps and W. B. Purchase.

Texas Law Review 37 (December 1958): 262–66.

Lee, G. R. 'Medical Practitioner's Communications to the Police'. *New Zealand Medical Journal* 61, no. 353 (January 1962): 49–51.

Logan, W. P. D. 'Instruction of Medical Practitioners in Death Certification in England and Wales'. *Bulletin of the World Health Orgnisation* 11, no. 1-2 (1954): 258–61.

Lonsdale, Kathleen. 'The Right Use Of Science'. *New Zealand Science Review* 13, no. 3-4 (1955): 23–27.

Lynch, P. P. 'Medico-Legal'. *New Zealand Medical Journal* 45, no. 247 (June 1946): 179–82.

———. 'Medico-Legal'. *New Zealand Medical Journal* 47, no. 261 (October 1948): 448–57.

———. 'Medico-Legal'. *New Zealand Medical Journal* 49, no. 273 (October 1950): 518–21.

———. 'Medico-Legal'. *New Zealand Medical Journal* 50, no. 279 (October 1951): 497–99.

———. 'The Hospital, the Public and the Law'. *New Zealand Law Journal* 30, no. 9 (May 1954): 118–22.

———. 'Blood Tests in Motor-Vehicle Prosecutions'. *New Zealand Law Journal* 32, no. 12 (July 1956): 184–85.

———. 'The Doctor and the Patient in the Modern State'. *New Zealand Medical Journal* 56, no. 312 (April 1957): 70–75.

———. 'The Pathologist as a Physician'. *New Zealand Medical Journal* 56, no. 315 (October 1957): 494–97.

———. 'Medico-Legal'. *New Zealand Medical Journal* 56, no. 316 (December 1957): 654–58.

———. 'The Development of Diagnostic Laboratory Services in New Zealand'. *New Zealand Journal of Medical Laboratory Technology* 22, no. 1 (November 1968): 34–38.

M., A. K. 'Reviews'. Review of *Medical and Scientific Investigations in the Christie Case,* by Francis E. Camps. *Medico-Legal Journal* 22, no. 2 (1954): 59–61.

MacDonald, Allan. 'The Assessment of Damages for Personal Injury'. *New Zealand Medical Journal* 55, no. 309 (October 1956): 371–75.

Mant, A Keith. 'Milestones in the Developments of the British Medicolegal System'. *Medicine, Science and the Law* 17, no. 3 (July 1977): 155–63.

Mattingley, Joan. 'Chemistry in the Hospital Laboratory'. *Journal of the New Zealand Institute of Chemistry* 28, no. 3 (June 1964): 74–78.

Mercer, J. O., J. D. Reid, and K. F. M. Uttley. 'The Identification of Exhumed Bodies'. *New Zealand Medical Journal* 53, no. 296 (August 1954): 329–34.

Muir, A. A. 'A Routine Case for the Forensic Science Laboratory'. *Police Journal* 38, no. 8 (August 1965): 360–65.

Nagle, R. 'Medico-Legalism'. *Medicine, Science and the Law* 10, no. 3 (July 1970): 158–59.

Nelson, D. F. 'Things in the Witness Box'. *Journal of the New Zealand Institute of Chemistry* 30, no. 3 (1966): 127–35.

Nevins, Allan. 'American Journalism and Its Historical Treatment'. *Journalism and Mass*

Communication Quarterly 36, no. 4 (1959): 411–22, 519. https://doi.org/10.1177/107769905903600403.

Nickolls, Lewis C. 'The Development of Forensic Science'. *Medico-Legal Journal* 27, no. 1 (1959): 22–25.

New Zealand Society of Pathologists. 'Abstracts of Papers Presented at Fifteenth Annual Conference'. *New Zealand Medical Journal* 62, no. 372 (August 1963): 377–81.

———. 'Report of Sixteenth Annual Conference'. *New Zealand Medical Journal* 63, no. 386 (October 1964): 664–69.

———. 'Report of Seventeenth Annual Conference'. *New Zealand Medical Journal* 64, no. 397 (September 1965): 512–18.

———. 'Proceedings'. *New Zealand Medical Journal* 67, no. 428 (February 1968): 224–28.

Paul, David M. 'The Opinion'. *Medicine, Science and the Law* 20, no. 3 (July 1980): 184–88.

Penistan, John. 'The Harper Autopsy'. *Canadian Society of Forensic Science Journal* 2, no. 3 (1969): 53–63.

Polson, Cyril John. 'Finger Prints and Finger Printing: An Historical Study'. *Criminal Law and Criminology* 41, no. 4 (1950- 1951): 690–704.

R., J. M. 'Reviews'. Review of *The Man On Your Conscience*, by Michael Eddowes. *Medico-Legal Journal* 23, no. 4 (1955): 121-2.

Robinson, Ann E., and Francis E. Camps. 'Scientific Problems Associated with the Road Safety Act 1967'. *Medicine, Science and the Law* 10, no. 2 (April 1970): 69–75.

Scientist. 'Science in the Public Service'. *New Zealand Monthly Review* 6, no. 64 (1966): 18–19.

Sharman, C. H. L. 'Narcotic Control in Canada'. *Police Journal* 3, no. 4 (October 1930): 535–49. https://doi.org/10.1177/0032258x3000300406.

Sharpe, Noble. 'The Canoe Lake Mystery'. *Canadian Society of Forensic Science Journal* 3, no. 2 (1970): 34–40.

Shorland, F. B. '"Who's Blinded by Science?"' *New Zealand Science Review* 20, no. 4 (1962): 68–73.

Simpson, Keith. 'The Seconal Capsule Murder: R. v. John and Janet Armstrong'. *Police Journal* 31, no. 1 (January-March 1958): 23–30.

———. 'The Need for an Autopsy'. *Police Journal* 34, no. 1 (January-February 1961): 13–17.

———. 'The Trial of Stephen Truscott'. *Medico-Legal Journal* 34, no. 2 (1966): 82–83.

———. 'The Case against Steven Truscott in Canada'. *Medico-Legal Journal* 36, no. 2 (1968): 58–71.

———. 'Developments in the Practice of Forensic Medicine'. *Police Journal* 43, no. 10 (October 1970): 267–71.

Smith, G. Stewart. 'Clinical Pathology and Forensic Medicine'. *Medicine, Science and the Law* 2, no. 4 (July 1962): 244–57.

Smith, Sydney. 'The Identification of Firearms and Projectiles: As Illustrated by the Case of the Murder of Sir Lee Stack Pasha'. *Police Journal* 1, no. 3 (1928): 411–23.

———. 'The Investigation of Firearm Injuries'. *Transactions of the Medico-Legal Society* 23 (1928-

1929): 81–106.

Sperber, G. H. 'Forensic Odontology'. *Legal Medical Quarterly* 2, no. 1 (March 1978): 36–39.

Teare, R. Donald. 'Facilities for Forensic Pathological Investigation'. *Medicine, Science and the Law* 1, no. 3 (April 1961): 286–91.

Thomas, J. L. 'The Universities and the Police'. *Police Journal* 31, no. 1 (January- March 1958): 45–52.

Thomsen, I. L. 'Explaining Science to the Public'. *New Zealand Science Review* 11 (10): 140–41.

Tryhorn, F. G. 'Home Office Forensic Science Laboratories - Past and Future'. *Medicine, Science and the Law* 1, no. 3 (April 1961): 298–303.

Turner, Ralph F. 'Police Science Book Reviews'. Review of *Medical and Scientific Investigation in the Christie Case,* by Francis E. Camps. *Journal of Criminal Law, Criminology and Police Science* 46, no. 5 (1955-1956): 748–52.

Walls, H. J. 'Whither Forensic Science'. *Medicine, Science and the Law* 6, no. 4 (October 1966): 183–89.

West, F. L. G. 'The Medical Witness'. *New Zealand Medical Journal* 53, no. 298 (December 1954): 580–85.

West, Rebecca. 'Book Reviews'. Review of *Reflections on Hanging,* by Arthur Koestler. *Virginia Law Review* 43 (1957): 1353-65.

Wilson, J. 'The Doctor as an Expert Witness'. *New Zealand Medical Journal* 65, no. 408 (August 1966): 538–41.

Winstanley, D. P. 'Reviews.' *Textbook on Foresnsic Evidence,* edited by A. Ponsold. *Medicine, Science and the Law* 8, no. 1 (January 1968): 69.

Wright, Heather. 'Rigorous Science'. *Beaver* 87, no. 1 (2007): 30–35.

Wright-St. Clair, R. E. 'Murder for Anatomy'. *New Zealand Medical Journal* 60, no. 342 (February 1961): 64–69.

Judicial decisions:

Folkes v. Chadd (1783) 3 Doug. K.B. 157.

Truscott (Re) [2007] ONCA 575.

Legislation:

Coroner's Amendment Act 1926 (Eng.).

Murder (Abolition of Death Penalty) Act 1965 (Eng.).

Mazagine articles

Blaiklock, E. M. 'Blinded by Science?'. *New Zealand Listener*, March 10, 1961.

Marsden, Ernest. 'The Scientist Replies'. *New Zealand Listener*, March 17, 1961.

Steeds, Bernie. ‘Murder, They Said’. *New Zealand Listener*, April 22, 1989.

Newspapers

Australia:

Sydney Tribune.

Britain:

Aberdeen Evening Express.

Birmingham Gazette.

Birmingham Post.

Cheshire Observer.

Courier and Advertiser.

Coventry Evening Telegraph.

Daily Mail.

Daily Mirror.

Daily Telegraph.

Guardian.

Liverpool Echo.

Liverpool Echo and Evening Express.

Manchester Guardian.

Newcastle Journal.

Northampton Chronicle and Echo.

Nottingham Journal.

Observer.

Penrith Observer.

People.

Shields Daily News.

Stirling Observer.

Sunday Telegraph.

Sunday Times.

Sunderland Echo.

Times.

West London Observer.

Western Mail.

Wiltshire Times.

Yorkshire Evening Post.

Yorkshire Post and Leeds Mercury.

Canada:

Bench and Bar: The National Legal Newspaper.

Brandon Sun.

Calgary Herald.

Edmonton Journal.

Gazette.

Leader-Post.

Liberal.

Nanaimo Daily News.

National Post.

Newmarket Era.

Northern Advance.

Ottawa Citizen.

Ottawa Journal.

Province.

Star-Phoenix.

Stouffville Tribune.

Times and Guide.

Times Colonist.

Vancouver Sun.

Watchman-Warder.

Windsor Star.

Winnipeg Evening Tribune.

Winnipeg Tribune.

New Zealand:

Auckland Star.

Dominion.

Dominion Post.

Dominion Sunday Times.

Evening Post.

Evening Star.

Gisborne Herald.

New Zealand Herald.

Otago Daily Times.

Press.

Waikato Independent.

Pamphlets

Sprouse, Jim and Pat Booth. *ABC of Injustice*. Auckland: Arthur Thomas Retrial Committee, 1976.

Department of Scientific and Industrial Research Chemistry Division. *Forensic Science in DSIR*. Wellington: Department of Scientific and Industrial Research, 1986.

Parliamentary debates

New Zealand:

Parliamentary Debates, House of Representatives, Volume 328 (October 4 1961), p. 2769. https://babel.hathitrust.org/cgi/pt?id=uc1.321060198418 47&view=1up&seq=765.

———, Volume 453 (October 13 1983), pp. 3092-3093. https://babel.hathitrust.org/cgi/pt?id=uc1.b3281404&view=1up&seq=668.

Britain:

Parliamentary Debates, House of Commons, Third Series, Volume 268 (March 27 1882) 4-5.

———, Fifth Series, Volume 518 (July 29 1953) 1436.

Reports

Department of Scientific and Industrial Research Chemistry Division. *Current Projects and Organisation 1983*. Compiled by H. V. Brewerton. N.p.: Department of Scientific and Industrial Research, 1983.

———. *Current Projects and Organisation 1985*. Compiled by H. V. Brewerton. N.p.: Department of Scientific and Industrial Research, 1985.

Fifteenth Session of the Executive Board. *Minutes of the Eighth Meeting, Palais Des Nations, Geneva,*

Monday, 24 January 1955 at 2:30 p.m. Geneva?: World Health Organisation, 1955. https://apps.who.int/iris/handle/10665/130669.

Fifth World Health Assembly, *Fifth World Health Assembly, Geneva, 5 to 22 May 1952: Resolutions and Decisions: Plenary Meetings: Verbatim Records: Committees: Minutes and Reports: International Sanitary Regulations: Reservations: Annexes.* Geneva?: World Health Organisation, 1952. https://apps.who.int/iris/handle/10665/85641.

Fourteenth session of Regional Committee for the Western Pacific. *Thirteenth Annual Report of the Regional Director to the Regional Committee for the Western Pacific Covering the Period, 1 July 1962 - 30 June 1963.* Manila: World Health Organisation, 1963. https://apps.who.int/iris/handle/10665/207378.

French, Anne, and Richard Norman. *Delivering a Science Business*. Edited by Anne French. Wellington: Victoria Link, 1999.

New Zealand National Research Advisory Council. *Forensic Services of DSIR: Working Party Report*. Wellington: National Research Advisory Council, 1982.

Nineteenth World Health Assembly, *Nineteenth World Health Assembly, Geneva, 3-20 May 1966: Part II: Plenary Meetings: Verbatim Records: Committees: Minutes and Reports.* Geneva?: World Health Organisation, 1966. https://apps.who.int/iris/handle/10665/85789.

Royal Commission of New Zealand. *Report of the Royal Commission to Inquire into the Circumstances of the Convictions of Arthur Allan Thomas for the Murders of David Harvey Crewe and Jeanette Lenore Crewe*. Wellington: P. D. Hasselberg, Government Printer, 1980.

Science and Technology Select Committee of the House of Lords. *Forensic Science and the Criminal Justice System: A Blueprint for Change*. London: House of Lords, 2019. https://publications.parliament.uk/pa/ld201719/ldselect/ldsctech/333/333.pdf.

Seventeenth session of the Regional Committee for the Western Pacific. *Final Report of the Seventeenth Session of the Regional Committee for the Western Pacific.* Manila: World Health Organisation, 1966. https://apps.who.int/iris/handle/10665/246319.

Sixteenth session of Regional Committee for the Western Pacific. *Final Report of the Sixteenth Session of the Regional Committee for the Western Pacific*. Manila: World Health Organisation, 1965. https://apps.who.int/iris/handle/10665/246317.

Special Committee of the Senate of Canada on Science Policy. *Proceedings of the Special Committee on Science Policy*. 8 vols. Ottawa: The Queen's Printer for Canada, 1969.

Thirty-Nineth Session of the Executive Board. *Regional Committee for the Western Pacific: Report on the Seventeenth Session*. Manila?: World Health Organisation, 1966 https://apps.who.int/iris/handle/10665/144082.

Thirty-Seventh Session of Executive Board. *Regional Committee for the Western Pacific: Report on the Sixteenth Session.* Manila?: World Health Organisation, 1965. https://apps.who.int/iris/handle/10665/143598.

World Health Organisation. *First Report on the World Health Situation 1954-1956. World Health Organisation.* N.p.: World Health Organisation, 1959. https://apps.who.int/iris/handle/10665/85718.

———. *Second Report on the World Health Situation, 1957-1960.* N.p.: World Health Organisation, 1963. https://apps.who.int/iris/handle/10665/85752.

———. *Third Report on the World Health Situation, 1961-1964.* N.p.: World Health Organisation, 1967. https://apps.who.int/iris/handle/10665/85794.

World Health Organisation and Brock Chisholm. *Work of WHO, 1950: Annual Report of the Director-General to the World Health Assembly and to the United Nations.* N.p.: World Health Organisation, 1951. https://apps.who.int/iris/handle/10665/85609.

———. *The Work of WHO 1951: Annual Report of the Director-General to the World Health Assembly and to the United Nations*. N.p.: World Health Organisation, 1952. https://apps.who.int/iris/handle/10665/85637.

World Health Organisation and Marcolino Gomes Candau. *The Work of WHO, 1955: Annual Report of the Director-General to the World Health Assembly and to the United Nations.* N.p.: World Health Organisation, 1956. https://apps.who.int/iris/handle/10665/85666.

———. *The Work of WHO, 1957: Annual Report of the Director-General to the World Health Assembly and to the United Nations. World Health Organisation.* N.p.: World Health Organisation, 1958. https://apps.who.int/iris/handle/10665/85693.

———. *The Work of WHO, 1962: Annual Report of the Director-General to the World Health Assembly and to the United Nations.* N.p.: World Health Organisation, 1963. https://apps.who.int/iris/handle/10665/85753.

———. *The Work of WHO, 1964: Annual Report of the Director-General to the World Health Assembly and to the United Nations*. N.p: World Health Organisation, 1965. https://apps.who.int/iris/handle/10665/85775.

———. *The Work of WHO, 1965: Annual Report of the Director-General to the World Health Assembly and to the United Nations*. N.p.: World Health Organisation, 1966. https://apps.who.int/iris/handle/10665/85784.

———. *The Work of WHO, 1966: Annual Report of the Director-General to the World Health Assembly and to the United Nations*. N.p.: World Health Organisation, 1967. https://apps.who.int/iris/handle/10665/85795.

———. *The Work of WHO, 1967: Annual Report of the Director-General to the World Health Assembly and to the United Nations.* N.p.: World Health Organisation, 1968. https://apps.who.int/iris/handle/10665/85804.

———. *The Work of WHO, 1968: Annual Report of the Director-General to the World Health Assembly and to the United Nations*. N.p.: World Health Organisation, 1969. https://apps.who.int/iris/handle/10665/85812.

World Health Organisation and Regional Office for the Eastern Mediterranean. *Minutes of the Second Meeting. Held at WHO Regional Headquarters, Alexandria on Thursday, 22 August 1963.* Alexandria?: World Health Organisation, 1963. https://apps.who.int/iris/handle/10665/123875.

———. *Minutes of the Second Meeting. Held at Palais Des Nations, Geneva on Wednesday, 28 August 1963.* Geneva?: World Health Organisation, 1963. https://apps.who.int/iris/handle/10665/123879.

———. *Minutes of the Second Meeting. Held at Palais Des Nations, Geneva, Tuesday, 22 September 1964.* Geneva?: World Health Organisation, 1964. https://apps.who.int/iris/handle/10665/124001.

Trial Transcripts

Blundell, R. H., and G. Haswell Wilson, eds. *Trial of Buck Ruxton*. Sydney: Butterworth, 1937.

Tennyson Jesse, F., ed. *Trials of Timothy John Evans and John Reginald Halliday Christie*. Edinburgh: William Hodge, 1957.

Wilson, H. J., ed. *The Bayly Case*. Wellington: National Magazines, 1934.

Unpublished Secondary Sources

Theses and dissertations

Duvall, Nicholas Edward. 'Forensic Medicine in Scotland, 1914-39'. PhD diss., University of Manchester, 2013.

Huang, Mei-Chien. 'Sir Sydney Smith's Contribution to the Change of the Medical Detective's Working Style from the 'Lone Expert' to 'a Team of Scientists' in Early Twentieth Century England and Scotland'. Honours diss., University of Canterbury, 2014.

Ward, Jennifer. 'Origins and Development of Forensic Medicine and Forensic Science in England, 1823-1946'. PhD diss., Open University, 1993.

Published Secondary Sources

Books:

Adam, Alison. *A History of Forensic Science: British Beginnings in the Twentieth Century*. London: Routledge, 2016.

Bell, Amy Helen. *Murder Capital: Suspicious Deaths in London, 1933-53*. Manchester: Manchester University Press, 2015.

Botting, Gary. *Wrongful Conviction in Canadian Law*. Ontario: LexisNexis Canada, 2010.

Brown, Malcolm, and Paul Wilson. *Justice and Nightmares: Successes and Failures of Forensic Science*. Kensington, New South Wales: New South Wales University Press, 1992.

Burney, Ian. *Bodies of Evidence: Medicine and the Politics of the English Inquest, 1830-1926.* Baltimore: John Hopkins University Press, 2000.

———. *Poison, Detection, and the Victorian Imagination*. Manchester: Manchester University Press, 2006.

Burney, Ian, and Christopher Hamlin, eds. *Global Forensic Cultures: Making Fact and Justice in the Modern Era*. Baltimore: John Hopkins University Press, 2019.

Burney, Ian, and Neil Pemberton. *Murder and the Making of Engish CSI*. Baltimore: John Hopkins University Press, 2016.

Chapman, Jane L. *Gender, Citizenship and Newspapers: Historical and Transnational Perspectives*.

Palgrave Macmillan, 2013.
https://ebookcentral.proquest.com/lib/canterbury/reader.action?docID=1161428.

Chayko, G.M., E.D. Gulliver, and D.V. Macdougall, eds. *Forensic Evidence In Canada*. Aurora, Ontario: Canada Law Books, 1991.

Conboy, Martin. *Journalism: A Critical History*. London: SAGE Publications, 2004.
https://ebookcentral.proquest.com/lib/canterbury/reader.action?docID=254578.

Crowther, M. Anne, and Brenda White. *On Soul and Conscience: The Medical Expert and Crime: 150 Years of Forensic Medicine in Glasgow*. Aberdeen: Aberdeen University Press, 1988.

Eddleston, John J. *Blind Justice: Miscarriage of Justice in Twentieth-Century Britain?* Oxford: ABC-CLIO Ltd, 2000.

Eddowes, John. *Two Killers of Rillington Place*. London: Little, Brown, 1994.

Emsley, John. *The Elements of Murder: A History of Poison*. Oxford: Oxford University Press, 2005.
https://ebookcentral.proquest.com/lib/canterbury/reader.action?docID=422563.

Evans, Colin. *A Question of Evidence*. Hoboken, New Jersey: John Wiley and Sons, 2003.

Ferrall, Charles, and Rebecca Ellis. *The Trials of Eric Mareo*. Wellington: Victoria University Press, 2002. http://nzetc.victoria.ac.nz/tm/scholarly/tei-FerTria-t1-front-d4.html.

Golan, Tal. *Laws of Men and Laws of Nature: The History of Scientific Expert Testimony in England and America.* Cambridge: Harvard University Press, 2004.

Hughson, W. G. M., and A. J. Ellis, eds. *A History of Chemistry Division*. Wellington: New Zealand Department of Scientific and Industrial Research, 1981.

Jackson, Robert. *Francis Camps*. London: Hart-Davis MacGibbon, 1975.

Jessel, David. *Trial and Error*. London: Headline Book, 1994.

Kaye, Brian H. *Science and the Detective*. New York: VCH Publishers, 1995.

MacDermot, H. E. *Maude Abbott: A Memoir*. Toronto: Macmillan Company of Canada, 1941.

Mort, Frank. *Capital Affairs: London and the Making of the Permissive Society*. New Haven: Yale University Press, 2010.

Newbold, Greg. *Crime in New Zealand*. Palmerston North: Dunmore Press, 2000.

Odell, Robin. *Medical Detectives: The Lives and Cases of Britain's Forensic Five*. Stroud: The History Press, 2013.

Petersen, Myrna L. *The Pathological Casebook of Dr Frances McGill*. Regina: Ideaton Entertainment, 2005.

Prime, R. J., and R. Higaki, eds. *Laboratory Guide for the Investigator*. Ontario: Centre of Forensic Sciences, 1997.

Root, Neil. *Frenzy! Heath, Haigh and Christie: The First Great Tabloid Murderers*. London: Preface Publishing, 2011.

Rose, Andrew. *Lethal Witness: Sir Bernard Spilsbury, Honorary Pathologist*. Kent, OH: The Kent State University Press, 2007.

Saferstein, Richard, ed. *Forensic Science Handbook*. Vol. 3. Upper Saddle River, New Jersey: Pearson

Education, 2010.

Sher, Julian. *Until You Are Dead: Steven Truscott's Long Ride into History*. Toronto: Random House, 2001.

Temple, Mick. *The British Press*. Berkshire: Open University Press, 2008. https://ebookcentral.proquest.com/lib/canterbury/reader.action?docID=409779#.

Trent, Bill. *Who Killed Lynne Harper?* Ottawa: Optimum Publishing Company Ltd, 1979.

Ubelaker, Douglas H., ed. *The Global Practice of Forensic Science*. Chichester, England: Wiley Blackwell, 2015. https://ebookcentral.proquest.com/lib/canterbury/detail.action?docID=1895561.

Walker, Clive, and Keir Starmer, eds. *Miscarriages of Justice: A Review of Justice in Error*. London: Blackstone Press, 1999.

Watson, Katherine D. *Poisoned Lives: English Poisoners and Their Victims*. London: Hambledon and London. 2004.

———. *Forensic Medicine in Western Society: A History*. Oxon: Routledge, 2011.

Book chapters:

Hamlin, Christopher. 'Introduction: Forensic Facts, the Guts of Rights'. In Burney and Hamlin, *Global Forensic Cultures,* 1–33.

Sauvageau, Anny, and Graham R. Jones. 'Forensic Sciences in Canada'. In Ubelaker, *The Global Practice of Forensic Science*, 29–37. https://ebookcentral.proquest.com/lib/canterbury/reader.action?docID=1895561&ppg=61.

Simons, John. 'Real Detectives and Fictional Criminals'. In *Watching the Detectives: Essays on Crime Fiction*, edited by Ian A. Bell and Graham Daldry, 84–96. Basingstoke: Macmillan, 1990.

Strange, Carolyn, and Tina Loo. 'The Moral of the Story: Gender and Murder in Canadian True Crime Magazines of the 1940s'. In *Romancing the Tome: Popular Culture, Law and Feminism*, edited by Margaret Thornton, 221–40. London: Cavendish Publishing, 2002. https://ebookcentral.proquest.com/lib/canterbury/reader.action?docID=220294&ppg=242.

Ubelaker, Douglas H. 'Conclusions: Global Common Themes and Variations'. In Ubelaker, *The Global Practice of Forensic Science*, 351–60. https://ebookcentral.proquest.com/lib/canterbury/reader.action?docID=1895561&ppg=383.

Wolffram, Heather. 'Forensic Knowledge and Forensic Networks in Britain's Empire: The Case of Sydney Smith'. In Burney and Hamlin, *Global Forensic Cultures*, 305–24.

Journal articles, book reviews and magazine articles:

Central Criminal Court Journalists' Association. 'The Old Bailey: London's Seat of Criminal Justice'. *American Bar Association Journal* 57, no. 11 (November 1971): 1104–10.

Bailey, Victor. 'The Shadows of the Gallows: The Death Penalty and the British Labour Government, 1945-51'. *Law and History Review* 18, no. 2 (Summer 2000): 305–49.

Bedford, Keith. 'Forensic Science Services'. *New Zealand Law Journal*, no. 8 (September 2011): 285–

88.

Bingham, Adrian. 'The Digitization of Newspaper Archives: Opportunities and Challenges for Historians'. *Twentieth Century British History* 21, no. 2 (June 2010): 225–31. https://doi.org/10.1093/tcbh/hwq007.

Bryan, Robert R. 'The Execution of the Innocent: The Tragedy of the Hauptmann-Lindburgh and Bigelaw Cases'. *New York University Review of Law and Social Change* 18, no. 3 (1990-1991): 831–71.

Burney, Ian. Review of *A History of Forensic Science: British Beginnings in the Twentieth Century*, by Alison Adam. *Ambix* 63, no. 4 (2016): 353–55.

Burney, Ian, and Neil Pemberton. 'The Rise and Fall of Celebrity Pathology'. *British Medical Journal* 341, no. 7786 (December 2010): 1319–21. https://doi-org.ezproxy.canterbury.ac.nz/10.1136/bmj.c6500.

———. 'Bruised Witness: Bernard Spilsbury and the Performance of Early Twentieth-Century English Forensic Pathology'. *Medical History* 55, no. 1 (2011): 41–60. https://doi.org/10.1017/s0025727300006049.

Cole, Simon A. 'Forensic Science and Wrongful Convictions: From Exposer to Contributor to Corrector'. *New England Law Review* 46, no. 4 (Summer 2012): 711–36.

———. 'Scandal, Fraud, and the Reform of Forensic Science: The Case of Fingerprint Analysis'. *West Virginia Law Review* 119, no. 2 (Winter 2016): 523–48.

Dror, Itiel E. 'Biases in Forensic Experts'. *Science* 360, no. 6386 (April 2018): 243. https://doi.org/10.1126/science.aat8443.

Freckelton, Ian. 'Death Investigation and the Evolving Role of the Coroner'. *Otago Law Review* 11, no. 4 (2008): 565–84.

Jermyn, Deborah. 'Labs and Slabs: Television Crime Drama and the Quest for Forensic Realism'. *Studies in History and Philosophy of Science Part C :Studies in History and Philosophy of Biological and Biomedical Sciences* 44, no. 1 (2013): 103–9. https://doi.org/10.1016/j.shpsc.2012.09.006.

Joynt, B. P. 'Forensic Toxicology; Current Status/Recent Trends'. *Canadian Society of Forensic Science Journal* 29, no. 2 (1996): 57–71.

Kirby, David A. 'Forensic Fictions: Science, Television Production, and Modern Storytelling'. *Studies in History and Philosophy of Science Part C :Studies in History and Philosophy of Biological and Biomedical Sciences* 44, no. 1 (2013): 92–102. https://doi.org/10.1016/j.shpsc.2012.09.007.

MacLean, Neil. 'The Vision and the Reality: Reflections on the Evolving Role of the New Zealand Coroner in 2015'. *Waikato Law Review* 23 (2015): 1–21.

Millett, Frederick C. 'Will the United States Follow England (and the Rest of the World) in Abandoning Capital Punishment'. *Pierce Law Review* 6, no. 3 (2007): 547–645.

Nicholson, Bob. 'The Digital Turn: Exploring the Methodological Possibilities of Digital Newspaper Archives'. *Media History* 19, no. 1 (2013): 59–73. https://doi.org/10.1080/13688804.2012.752963.

Ramsland, Katherine. 'Francis Camps: Inside the Palace of Truth'. *Forensic Examiner* 18, no. 2 (Summer 2009): 80–82.

Stevenson, Craig. 'The Role of the Institute of Environmental Health and Forensic Sciences in Civil Defence'. *Tephra* 12, no. 1 (March 1993): 12–14.

Government of Ontario Analytical Laboratories System. 'The Development of Forensic Science in Ontario'. *GOALS Newsletter*, no. 9 (December 1992): 7–10.

Westman, Jeffrey Nels. 'No Matter How Small: Child Witness in Canadian Criminal Trials'. *Appeal: Review of Current Law and Law Reform* 23 (2018): 65-88.

Willheim, Ernst. 'Are Our Courts Truly Open?'. *Public Law Review* 13, no. 3 (September 2002): 191–204.

Yska, Redmer. 'Veronal: who remembers veronal?'. *Matters of Substance*, August 2016.

Reports:

Pollanen, Michael S., Matthew J. Bowes, Sherah L. VanLaerhoven, Joanne Wallace. *Forensic Science in Canada: A Report of Multidisciplinary Discussion*. Toronto: University of Toronto, 2013.

Web pages:

'Biography for Julian Sher'. Julian Sher's Official Website. Accessed December 18, 2018. http://www.juliansher.com/bio/.

Canadian Society of Forensic Science. 'The Centre of Forensic Sciences'. Accessed April 22, 2019. https://www.csfs.ca/resources/government-labs-in-canada/centre-of-forensic-sciences/.

Collins, Simon. 'Pathologists Warn of Risk of Dismantling National Forensic Pathology Service'. Healthcentral.nz. August 20, 2018. https://healthcentral.nz/pathologists-warn-of-risk-of-dismantling-national-forensic-pathology-service/.

'Crisis Looms in NZ Forensic Pathology Service'. RNZ. August 22, 2018. https://www.rnz.co.nz/national/programmes/ninetonoon/audio/2018659186/crisis-looms-in-nz-forensic-pathology-service.

'Dr Frances Gertude McGill'. Library and Archives Canada. Accessed August 15, 2019. https://www.collectionscanada.gc.ca/women/030001-1417-e.html.

'Government Needs to Stop Break-up of Forensic Pathology'. Scoop Health. August 22, 2018. https://www.scoop.co.nz/stories/GE1808/S00054/government-needs-to-stop-break-up-of-forensic-pathology.htm.

'Key Moments in the Guardian's History: A Timeline'. Guardian. Accessed July 4, 2019. https://www.theguardian.com/gnm-archive/2002/jun/11/1.

Macdonald, Nikki. 'Can We Trust Forensic Science?'. Stuff.co.nz. August 29, 2018. https://www.stuff.co.nz/science/106163245/in-the-dock--how-fallible-is-forensic-sciencecan-we-trust-forensic-science.

'Maigret'. IMDB. Accessed January 18, 2020. https://www.imdb.com/title/tt0159178/.

Renwick, Meredith, Rosemary Bennett, and Toronto Homes for the Aged Division. 'Isabel Lebourdais: I Got So Angry'. In *Then and Now: A Century of Memories*. Toronto: City of Toronto, 2000. Accessed December 18, 2018. https://web.archive.org/web/20070930044025/http://www.toronto.ca/homesfortheaged/leb

ourdais.htm.

'Truscott Defender Doesn't Know When to Stop'. Globe and Mail. October 20, 2001. https://www.theglobeandmail.com/arts/truscott-defender-doesnt-know-when-to-stop/article763802/.

Reference works:

Dictionary of New Zealand Law. Accessed September 17, 2019. https://advance.lexis.com/toc/?pdmfid=1230042&crid=51c812f7-2a61-4790-867d-7db240b7de75&pdtocfullpath=%2Fshared%2Ftableofcontents%2Furn%3AcontentItem%3A5F4D-XNH1-FKDR-9000-00000-00&ecomp=fb_fk&earg=sr8&prid=71200afd-94e8-4b04-bb6e-160da65f1af2.

Lexico. https://www.lexico.com.

McLintock, A.H., ed. *An Encyclopaedia of New Zealand.* 1966 ed. http://www.teara.govt.nz/en/1966.

Ministry for Culture and Heritage. *New Zealand History.* https://nzhistory.govt.nz.

———. *Te Ara- the Encyclopedia of New Zealand*. http:www.teara.govt.nz/en.

Siegel, Jay A., and Pekka J. Saukko, eds. *Encyclopedia of Forensic Sciences*. 2nd ed. London: Elsevier Science and Technology, 2012. https://ebookcentral.proquest.com/lib/canterbury/reader.action?docID=1125295&query=history%252Bof%252Bforensic%252Bsciences.

Hale, Matthew. *History of Common Law of England*. 3rd ed. London in the Savoy: E. and R. Nutt, and R. Gosling (assigns of E. Sayer) for T. Waller, 1739. https://heinonline-org.ezproxy.canterbury.ac.nz/HOL/Page?handle=hein.cow/hclamat0001&id=1&collection=beal&index=.